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EUROGIN

INTERNATIONAL MULTIDISCIPLINARY HPV CONGRESS
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MONACO
DECEMBER 4-7,
2019

ACCELERATING DETECTION AND ELIMINATION OF HPV AND RELATED CANCERS

Congress Presidents: Walter Kinney (USA), Matti Lehtinen (Finland)



EUROPEAN RESEARCH ORGANIZATION ON GENITAL INFECTION AND NEOPLASIA



MTC - MAIN TRAINING COURSE

The main training course is designed to provide summaries of the most relevant knowledge on HPV infection and associated diseases with the aim of assisting physicians and educators.

The topics covered range from the basic science fundamentals to emerging issues and the clinical uses of screening technologies, prophylactic HPV vaccines, the value of HPV detection and extending to HPV-related diseases in external genitalia and head & neck. Speakers will present only accepted evidence-based scientific information that has been published in the peer-reviewed medical literature.

MTC 01 **Trends and specific aspects of HPV driven cancer
(cervix, anus, vulva, penile, oro-pharynx)** **Auditorium Camille Blanc**
Chair: S. Franceschi (Italy), A. Giuliano (USA) **8:15 - 9:45**

The Opening Session will set the pace of what is happening to cancer types related to HPV infection in an era of big changes in prevention strategies for these tumours. Presentations will tackle the evolution of burden of cases and deaths from HPV-related cancers and highlight substantial differences by world region and cancer site. There will be room to compare cancer trends with changes in sexual behaviour and to revisit the natural history of HPV carcinogenesis, that is exquisitely dependent from the type of epithelium infected.

MTC 01-1	International trends in incidence and survival of HPV-related cancers	Shiels M.	USA
MTC 01-2	Epidemiology of HPV infection	Giuliano A.	USA
MTC 01-3	Current knowledge on HPV transmission, sexual behaviour messages	D'Souza A.	USA
MTC 01-4	Carcinogenesis according to epithelial sites Discussion	Doorbar J.	UK

Coffee break 9:45 - 10:15

MTC 02 **Revisiting the progress, practices and implementation
of HPV based screening** **Auditorium Camille Blanc**
Chair: J. Cuzick (UK), W. Kinney (USA) **10:15 - 11:45**

The implementation of HPV based screening programs comes with its own set of problems and opportunities. Experts will share their experience and recommendations in this session.

MTC 02-1	HPV based screening strategies	Cuzick J.	UK
MTC 02-2	Developing useful biomarkers for screening and triage	Jenkins D.	UK
MTC 02-3	Implementation experiences of HPV based screening	Van Dijk S.	Netherlands
MTC 02-4	Screening in vaccinated women	Dillner J.	Sweden
MTC 02-5	Self-screening programs – current experience Discussion	Berkhof H.	Netherlands

MTC 03 **Updating HPV immunization worldwide, the state of the art and new challenges** **Auditorium Camille Blanc**
 Chair: P. Bonanni (Italy), E. Joura (Austria) **13:30 - 15:00**

Prophylactic HPV vaccines have proven to be remarkably safe and effective in population use. In this course, we review the impacts so far, and examine future possibilities in considering the evidence relating to extension of vaccine programs to males, to women post treatment, to immunosuppressed populations, and to adults.

MTC 03-1	Public health impact of HPV vaccines	Hanley S.	Japan
MTC 03-2	Vaccination of boys: the rationale	Bonanni P.	Italy
MTC 03-3	Individual impact of HPV immunization in adults – new developments - post-conization	Joura E.	Austria
MTC 03-4	Individual impact of HPV immunization in adults – new developments - Immunosuppression	Palefsky J.	USA
MTC 03-5	Individual impact of HPV immunization in adults - adult protection Discussion	Bosch X.	Spain

Coffee break 15:00 -15:30

MTC 04 **Recent developments in HPV research** **Auditorium Camille Blanc**
 Chair: T. Broker (USA), M. Goodman (USA) **15:30 - 17:00**

This session is devoted to novel discoveries relevant to HPV carcinogenesis and treatment from the perspective of epidemiology, the laboratory, and the clinic. Few studies of HPV transmission have been conducted, but knowledge of HPV transmission dynamics is necessary to define strategies for disease control and assist in modeling prevention measures. HPV genetic variants have a strong influence on the risk of HPV-associated disease, and HPV16 sub-lineages are heterogeneously dispersed among the world's populations. This is likely a result of the co-evolution of HPV variants, especially HPV16 sub-lineages, with the human diaspora. HPV16 variants differ in viral persistence and disease progression with the A4 lineage showing greater cervical cancer risk in Asian studies; and the D2/D3 lineages showing greater cervical cancer risk in American studies. In addition to studies of viral genetics and type distribution, in recent years great progress has been made in improving vaccine delivery. Advances in nanotechnology will result in more effective and less toxic interventions against HPV-associated cancer. These and other insights into the biology of HPV-associated malignancies will assist with improvements in cervical cancer screening and drug deliver.

MTC 04-1	HPV transmission	Franco E.	Canada
MTC 04-2	HPV variants	Mirabello L.	USA
MTC 04-3	Polymeric nanoparticles for cancer vaccination and targeted drug delivery	Hennink W.	Netherlands
MTC 04-4	New insights in cervical carcinogenesis and implications for screening	Peto J.	UK
MTC 04-5	The diversification of HPV16 is driven by ongoing immune avoidance-related positive selection Discussion	Yeager M.	USA

FC - FREE COMMUNICATIONS

FC 01	HPV testing and genotyping (I) Chair: J. Tota (USA)		Room Auric 8:45 - 9:45
FC 01-1	Quality assurance for HPV testing in Australia – the first two years	Vincini G.	Australia
FC 01-2	HPV oncopredict: development of a novel diagnostic tool allowing accurate determination of sample cellularity and normalized genotype-specific viral load	Vallini I.	Italy
FC 01-3	High risk HPV infection among women older than 25 years in a North-East region of Mexico by PCR DNA test	Lúa Alvarado R.	Mexico
FC 01-4	Systematic literature review on the utility of extended genotype detection for HPV type 31: prevalence and risk for CIN3 disease	Malinowski D.	UK

Coffee break

9:45 - 10:15

FC 02	HPV prophylactic vaccines (I) Chair: E. Joura (Austria)		Room Auric 10:15 - 11:45
FC 02-1	Population-based HPV serosurvey among unvaccinated females reveals HPV16 herd effect post- gender-neutral vaccination with moderate vaccination coverage: follow-up of a community randomised trial	Gray P.	Finland
FC 02-2	Continuing evolution of gender-neutral HPV vaccination: an update on national immunization programs and evidence gaps associated with GNV policy development and program implementation	Morais E.	France
FC 02-3	HPV vaccination uptake in boys after introduction of gender-neutral HPV vaccination in germany - a retrospective database analysis (IMS vaccine analyzer)	Reuschenbach M.	Germany
FC 02-4	Gender-neutral HPV vaccination in national immunization programs of latin america and the caribbean, 2011-2019	Perez Carrega M. E.	Argentina
FC 02-5	Immunogenicity of an escherichia coli-produced HPV bivalent vaccine in females aged 9-45 years	Yao X.	China
FC 02-6	Real-world evidence confirms AS04-HPV-16/18 vaccine sustained cross-protection and overall protection regardless of type	Berlaimont V.	Belgium
FC 02-7	Immunogenicity and safety of the quadrivalent human papillomavirus (QHPV) vaccine in chinese girls (aged 9–19 years) and young women (aged 20–26 years): an open-label, phase 3, immunobridging study	Liao X.	China
FC 02-8	Immunogenicity and safety of a nine-valent human papillomavirus vaccine in women 27–45 years of age compared with young women 16–26 years of age: an open-label phase 3 trial	Jotterand V.	USA
FC 02-9	Natural boosting occurs in HPV vaccinated adolescents; exposure, immune response or both?	Donken R.	Canada
FC 02-10	Comparative study evaluating patients decision making between HPV4 vs HPV9 vaccine application in Mexico	Tiran Saucedo J.	Mexico

WS - WORKSHOPS

WS 01 **Workshop HPV immunization**
Chair: A. Vorsters (Belgium), J. Yarwood (UK)

Room Van Dongen
8:30 - 11:45

HPV vaccination programs are being implemented worldwide, with different degrees of success. For a number of countries the one dose HPV immunization schedule might be an interesting option, whereas other countries want to know whether sexually active women are an indication for HPV vaccination. Increasingly the policy and decision makers, as well as vaccinators and vaccinees want to understand the impact of immunization on the incidence of cervical cancer and cervical cancer elimination.

All this will be presented and discussed during the workshop along with the presentation of a few country HPV immunization examples.

Part I**8:30 - 9:45**

WS 01-1	One dose HPV schedule – a future option?	Kreimer A.	USA
WS 01-2	Vaccination of sexually active women: an indication?	Franco E.	Canada
WS 01-3	HPV vaccine introduction in Asia Discussion	Hanley S.	Japan

Coffee break • 9:45 - 10:15

Part II**10:15 - 11:45**

WS 01-4	Follow-up studies with bi-valent and quadrivalent vaccines in Europe: impact on cervical diseases and elimination	Pollock K.	UK
WS 01-5	Impact of HPV vaccination on the incidence of cervical cancer	Arbyn M.	Belgium
WS 01-6	The HPV vaccination program in the UK: preparation and implementation Discussion	Yarwood J.	UK

FC - FREE COMMUNICATIONS

FC 03	Epidemiology and natural history (I) Chair: P. Tommola (Finland), E. Lynge (Denmark)		Room Bosio 9:00 - 10:00
FC 03-1	Human Papillomavirus types in cervical dysplasia among young HPV-vaccinated women: population-based nested case-control study	Kann H.	Sweden
FC 03-2	HPV - associated cancers in Russia	Zaridze D.	Georgia
FC 03-3	HPV prevalence and type in women attending cervical cancer screening in Sikasso, Mali: a cross-sectional study	Jary A.	France
FC 03-4	Multiple HPV genital infection in unvaccinated young population from Brazil: a cross-sectional study	Wendland E. M.	Brazil
FC 03-5	Risk of acquiring human papillomavirus DNA for occupational surgical smoke exposure in gynecologists in China	Hu X.	China
FC 03-6	Co-infections of HPV16/18 with other high-risk HPV types and the risk of cervical carcinogenesis: a large population-based study	Ping W.	China

Coffee break			10:00 - 10:30
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FC 04	Epidemiology and natural history (II) Chair: P. Tommola (Finland), E. Lynge (Denmark)		Room Bosio 10:30 - 11:40
FC 04-1	Effect of a coriolus versicolor-based vaginal gel in HPV infected women: normalizing HPV-dependent cervical lesions (ASCUS/LSIL) and high-risk HPV clearance	Serrano L.	Spain
FC 04-2	Two distinct HPV mechanisms cause spontaneous miscarriage	Depuydt C.	Belgium
FC 04-3	Association of IL4R I75V polymorphism with susceptibility to HPV infection, cervical lesion and cervical cancer among women living in North Macedonia	Duvlis S.	North Macedonia
FC 04-4	Incidence and trends of HPV-associated cancers in men in the United States	Mazul A.	USA
FC 04-5	Long-term impact of screening on cervical cancer epidemiology: changing survivorship	Liu X.	Norway
FC 04-6	The association between dietary folate and vitamin B12 intake and the acquisition of genital human papillomavirus (HPV) infection	Santibenchakul S.	USA
FC 04-7	Projected cervical cancer incidence in Swaziland using three methods and local survey estimates	Ginindza T. G.	South Africa

FC 05	Public Health / Education (I) Chair: N. Osazuwa-Peters (USA)		Room Lifar 8:15 - 9:45
FC 05-1	The affordable care act and rate of human papillomavirus (HPV) vaccine uptake in the United States	Osazuwa-Peters N.	USA
FC 05-2	Design and content validation of a survey questionnaire assessing the determinants of HPV vaccine hesitancy in France: a Delphi study	Dib F.	France
FC 05-3	Determinants of HPV-vaccination coverage over time in the Netherlands	Schurink-VanT Klooster T.	Netherlands
FC 05-4	Baseline human papillomavirus vaccination prevalence prior to extended Food and Drug Administration licensure for adults 27-45 years old in the United States	Kasting M.	USA
FC 05-5	The decision to extend HPV vaccination to adolescent boys in the UK	Crofts J.	UK
FC 05-6	Ethnic differences in intention of daughters versus parents to vaccinate against HPV in Amsterdam, the Netherlands	Jongen V.	Netherlands
FC 05-7	HPV vaccine coverage in catch-up cohorts in the ancona area, Italy	Acuti Martellucci C.	Italy
FC 05-8	Knowledge of human papilloma virus infection and attitudes towards its vaccine	Jassim G.	Arabia

Coffee break			9:45 - 10:15
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FC 06	Low resource settings Chair: S. De Sanjosé (USA)		Room Lifar 10:15 - 11:45
FC 06-1	Towards cervical cancer control: opportunities and challenges in low- and middle-income countries (LMICs)	De Sanjose S.	USA
FC 06-2	HPV self-testing RCT in indigenous population: interim results	Lawton B.	Denmark
FC 06-3	Attendance to follow-up cervical cancer screening among rapid care HPV-positive Tanzanian women: a randomised trial and post-trial qualitative study	Linde D. S.	India
FC 06-4	Prevalence and determinants of human papillomavirus infection and cervical intraepithelial neoplasia among female sex workers in Mumbai, India	Pimple S.	USA
FC 06-5	High-risk human papillomavirus messenger RNA testing in wet – and dry – self-collected specimens for cervical lesion detection among high-risk women in Mombasa, Kenya	Islam J.	Nigeria
FC 06-7	Lesson learned for developing and transferring cervical cancer screening technology to Low Middle Income Countries (LMIC)	Wang Y.	China

SS - SCIENTIFIC SESSIONS

SS 01	Updating triage methods in HPV-based screening, an international experience Chair: J. Cuzick (UK)	Room Van Dongen 13:30 - 15:00	
SS 01-1	The Dutch algorithm: twice cytology (special case: HPV+ self-samples)	Berkhof H.	Netherlands
SS 01-2	The Italian algorithm: reflex cytology and hrHPV testing	Giorgi Rossi P.	Italy
SS 01-3	The US algorithm: HP16/18 with cytology only for other hrHPV+ women	Kinney W.	USA
SS 01-4	The Australian algorithm: a more complex alternative of the US policy	Canfell K.	Australia
SS 01-5	Meta-analysis of the accuracy and predictive values of triage options Discussion	Arbyn M.	Belgium

Coffee break	15:00 - 15:30
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SS 02	HPV and molecular testing of self-collected samples Chair: A. Lorincz (UK), C. Meijer (Netherlands)	Room Van Dongen 15:30 - 17:00	
SS 02-1	Comparison of HPV and methylation tests on different self-sampling devices, results of the P5.1 study	Cuzick J.	UK
SS 02-2	First results from VALHUDES study: accuracy of HPV on self-samples	Peeters E.	Belgium
SS 02-3	First results from the VALHUDES study: use of first-void urine for cervical cancer screening	Van Keer S.	Belgium
SS 02-4	Principles of validation for HPV testing on self-samples (devices, media, tests)	Arbyn M.	Belgium
SS 02-5	Triage of women with an HPV+ self-sample: host DNA methylation or host DNA methylation and genotyping	Heideman D.	Netherlands
SS 02-6	Follow-up adherence among women with an HPV+ self-sample Discussion	Tranberg M.	Denmark

SS 03	HPV vaccination in adults		Room Auric
	Chair: X. Bosch (Spain), J. Palefsky (USA)		15:30 - 17:00
SS 03-1	Introduction - vaccination in sexually active adults	Bosch X.	Spain
SS 03-2	HPV vaccination protects against HPV infection and disease in sexually active adults: a review of quadrivalent HPV vaccine clinical trials	Joura E.	Austria
SS 03-3	New sexual partnerships among sexually active US adults	Prabhu V. S.	USA
SS 03-4	Factors associated with HPV seropositivity in sexually active men	Palefsky J.	USA
SS 03-5	Prevalence, incidence, and natural history of HPV infection in women ages 24 - 45 participating in a vaccine trial	Garland S.	Australia
SS 03-6	Natural progression of persistent HPV infection and the resulting burden of HPV-related disease in adult women	Saah A.	USA
SS 03-7	Median age at onset of cervical HPV infection and diagnoses of cervical pre-cancers among women in the United States	Roberts C.	USA
SS 03-8	9-valent human papillomavirus (9VHPV) vaccine efficacy in women with prior HPV exposure: comparison with historic placebo population	Giuliano A.	USA
SS 03-9	Cost effectiveness of MAP vaccination in the US Discussion	Daniels V.	USA

FC - FREE COMMUNICATIONS

FC 07	Epidemiology and natural history (III) Chair: A. Burchell (Canada)		Room Auric 13:30 - 15:00
FC 07-1	Human papillomavirus genotype and prognosis of invasive cervical cancer: a nationwide cohort study	Lei J.	Sweden
FC 07-2	Preliminary evidence of the beneficial impact of the HPV vaccine in reducing HPV prevalence in men who have sex with men, Scotland	Roy K.	UK
FC 07-3	The risk of cervical cancer after cervical intraepithelial neoplasia grade 3: a population-based cohort study with 80,442 women	Loopik D.	Netherlands
FC 07-4	Association of age and viral factors with high-risk HPV persistence: a retrospective follow-up study	Meng Y.	USA
FC 07-5	HPV-related anogenital precancer and cancer among women with diabetes in Denmark	Reinholdt K.	Denmark
FC 07-6	Human papillomavirus infections in pregnant women in Norway and Sweden: a multi-center population based prospective cohort study	Væresbranden M.R.	Norway
FC 07-7	Human Papillomavirus DNA in surgical smoke during cervical loop electrosurgical excision procedures and its impact on the surgeon	Zhu X.	China
FC 07-8	Directionality of HPV infection transmission within heterosexual couples: a systematic review and meta-analysis	El-Zein M.	USA
FC 07-10	Factors predicting the spontaneous regression of cervical high grade squamous intra epithelial lesions (HSIL/CIN2)	Brun J-L.	France
Coffee break			15:00 - 15:30

FC 08	HPV prophylactic vaccines (II) Chair: D. Mesher (UK)	Room Auric 17:00 - 18:30	
FC 08-1	Impact and effectiveness of the quadrivalent and nonavalent human papillomavirus vaccine: a systematic literature review update	Garland S.	Australia
FC 08-2	Long-term effectiveness of the 9-valent human papillomavirus (9VHPV) vaccine in Scandinavian countries	Kjær S. K.	Denmark
FC 08-3	No HPV 6/11/16/18 infections up to 10 years after vaccination of 9-11 year-old girls with 2-doses of quadrivalent vaccine	Sauvageau C.	Canada
FC 08-4	Impact and cost-effectiveness of adopting WHO recommendations on cervical cancer elimination in the United States	Burger E.	USA
FC 08-5	Study of the impact of catch-up vaccination against papillomavirus on high-grade cervical dysplasia in France	Elies A.	France
FC 08-6	Effectiveness of HPV vaccination against invasive cervical cancer	Sparen P.	Sweden
FC 08-7	Infection with multiple human papillomavirus types in unvaccinated and vaccinated 17-year-old Norwegian girls	Laake I.	Norway
FC 08-8	Anal HPV prevalence soon after implementation of publicly funded vaccine for gay, bisexual and other men who have sex with men: a Canadian immunization research network-funded study	Burchell A.	Canada
FC 08-9	Burden of HPV related anogenital diseases in young women in Germany – an analysis of German statutory health insurance claims data from 2012 – 2017	Mihm S.	UK
FC 08-10	HPV vaccine against CIN3+ is also highly effective in Japan, but still suspended	Konno R.	Japan

WS - WORKSHOPS

Cervical cancer screening quality assurance**WS 02**

Training workshop for cervical cancer screening program coordinators and evaluators on quality assurance in cervical cancer screening.

Chair: S. Lönnberg (Finland), N. Segnan (Italy)

Room Lifar
13:30 - 17:00

Part I**13:30 - 15:00**

Screening and prevention of cervical cancer is undergoing major changes with the deployment of new screening methods and immunization programs. However, screening coverage remains an important determinant for the success of population-based cancer prevention efforts. Many programs still struggle with suboptimal attendance or adherence to the guidelines. This workshop aims to assess the recommendations from the current European guidelines and explore available strategies to improve screening coverage among hard to reach of women, discuss barriers to implementation of the quality assured screening strategies and look for possible solutions.

WS 02-1	Opening - What do we mean with quality assurance and quality improvement?	Lönnberg S. Segnan N.	Finland Italy
WS 02-2	Recommended QA and organization of cervical cancer screening	Lönnberg S.	Finland
WS 02-3	Barriers in attendance and access to quality assured screening	Rezeberga D.	Latvia
WS 02-4	Screening and importance of primary prevention	Armaroli P.	Italy
WS 02-5	How to enroll actively in a cohort never or inadequately screened women	Segnan N.	Italy
WS 02-6	Implementation and findings of primary HPV testing based on screening statistics Discussion	Elfström M.	Sweden

Coffee break • 15:00 - 15:30

Part II - Interactive session**15:30 - 17:00**

Interactive part with presentations from conference participants.

Focus: resolving barriers for effective screening, e.g. on poor coverage or attendance, problems with adherence to guidelines – also in the management of women tested positive – or lack of necessary evaluation research and monitoring. Presentations followed by discussion with the faculty and audience. The following aspects will be covered:

- Efforts to improve organization and fail-safe
- Improving coverage and impact in hard-to-reach population by conventional or new methods, and informed participation
- Plans and results on improving equity
- Synergies with screening and HPV vaccination.

WS 02-1	Low cervical cancer screening programme coverage – how to motivate non-attenders of different age groups?	Rezeberga D.	Latvia
WS 02-2	Interventional study evaluating cervical cancer screening strategies for women in precarious conditions in France	Reques L.	France
WS 02-3	Continuous quality monitoring leads to the identification of non-participation, irregular participation and inadequate follow-up as issues for improving effectiveness of cervical screening	Haelens A.	Belgium
WS 02-4	Evaluation of cervical cancer screening uptake and risk factors knowledge: health beliefs model (HBM)	Haile E.	Belgium
WS 02-5	Cervical cancer prevention and control program in Nepal: a success or failure? Discussion, summary and close	Ghimire S.	Nepal

WS - WORKSHOPS

WS 03	Workshop vulvar and anal diseases		Room Bosio
			13:30 - 18:30
Part I - Vulvovaginal syndromes			13:30 - 15:00
Chair: G. Donders (Belgium), J. Paavonen (Finland)			
WS 03-1	Vulvar dermatoses: natural history and risk for malignancy	Jakobsson M.	Finland
WS 03-2	Bacterial vaginosis	Donders G.	Belgium
WS 03-3	Aerobic vaginitis	Paavonen J.	Finland
WS 03-4	Localized provoked vulvodynia: conservative management or surgery?	Tommola P.	Finland
WS 03-5	Selected case presentations	Donders G.	Belgium
	Discussion		
Coffee break • 15:00 - 15:30			
Part II - Stump the expert: vulvovaginal and anal neoplasia - what is your diagnosis?			15:30 - 18:30
Chair: J. Bornstein (Israel)			
<p>The approach to diagnosing, classifying and treating a vulvar and anal condition has always been complicated. In the case of HPV-associated lesions and intraepithelial neoplasia, it may be controversial. This time, our course will discuss the approach to vulvar disease by presenting cases with vulvar lesions to a panel of experts. The expert's diagnosis and management will be questioned by the moderators and the audience.</p>			
WS 03-1	Case presentation: vulvar intraepithelial neoplasia – differentiated type	Preti M.	Finland
		Jakobsson M.	Finland
WS 03-2	Case presentation : vaginal intraepithelial neoplasia	Vieira-	UK
		Baptista P.	
		Egawa N.	UK
WS 03-4	Case presentation : vulvodynia	Paavonen J.	Finland
		Tommola P.	Finland
WS 03-3	Case presentation : anal intraepithelial neoplasia	Palefsky J.	USA
	Discussion and close		



The EUROGIN HPV and Head and Neck Cancer Forum highlights areas of active investigation in the field of HPV and head and neck cancers. It offers a review of the current epidemiologic efforts which focus on the natural history of HPV infection, risk of transmission, screening for early cancer detection, the potential impact of prophylactic HPV vaccines in the incidence of head and neck cancer, the role of HPV in benign head and neck disease. The event evaluates how the differing biology of HPV-HNC leads to a re-assessment of clinical staging and clinical prognostic characteristics. Given the viral etiology of these tumors, sessions address to review immune evasion mechanisms utilized by HPV and the understanding of these mechanisms, with the hope of opening the path to novel immunotherapeutic strategies to reactivate the host immune response against the virus and virally-associated cancer cells.

A dedicated debate session will focus on the controversies regarding the impact of HPV infection on oropharyngeal cancer, including diagnosis, management and decision making.

A special session deals with recurrent respiratory papillomatosis, a benign head and neck tumor caused by HPV infection but which can have a devastating and at times life threatening impact on patients. Taking the lessons learned from HPV-OPC, there is the potential of applying similar therapeutic approaches to this HPV-associated disease.

Immunotherapy represents a promising avenue for the treatment of head and neck cancers, with several treatment regimens showing significant promise in clinical trials. Recent immunotherapy trials will be presented.

HN 01	Head & Neck Forum - Treatment Chair: P. Bossi (Italy)		Room Poulenc 8:15 - 9:45
HN 01-1	Update on de-intensification strategies	Simon C.	Switzerland
HN 01-2	HPV-positive oropharyngeal cancers: immunological control and impact of immunotherapy	Welters M.	Netherlands
HN 01-3	Clinical and molecular factors modulating response and prognosis of HPV-positive cancers	Klussmann J. P.	Germany
HN 01-4	Improving efficacy of immunotherapy with combinations in HPV-positive cancers Discussion	Massarelli E.	USA

Coffee break			9:45 - 10:15
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HN 02	Screening for HPV (I) Chair: S. Franceschi (Italy)		Room Poulenc 10:15 - 11:45
HN 02-1	Etiologic role in global perspective	Aleman L.	Spain
HN 02-2	Should there be screening for HPV-driven oropharyngeal cancer?	Kreimer A.	USA
HN 02-3	Biomarker of choice: oral HPV. Understanding the strength and limitations	D'Souza A.	USA
HN 02-4	HPV serology and screening for oropharyngeal cancers	Anderson K.	USA
HN 02-5	HPV early antigen serology and screening for oropharyngeal cancer Discussion	Waterboer T.	Germany

HN 03	Screening for HPV (II) Chair: A. D'Souza (USA)		Room Poulenc 13:30 - 15:00
HN 03-1	Implications of high-risk biomarker seropositivity: bridging lessons from CIN to OPC	Robbins A. H.	France
HN 03-2	Oral HPV vs. serology	D'Souza A.	USA
HN 03-3	What to do with high risk biomarker positive? Lessons from unknown primary & prophylactic mucosectomy	Eisele D.	USA
HN 03-4	Current screening trial designs Discussion	Day A.	USA

Coffee break			15:00 - 15:30
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HN 04 A	HPV and Oropharynx / Head & Neck Cancer (submitted papers) Chair: E. Rettig (USA), A. Psyrri (Greece)		Room Poulenc 15:30 - 17:00
HN 04 A-1	Sociodemographic correlates of mortality among patients with HPV-positive oropharyngeal cancer in the United States	Osazuwa-Peters N.	USA
HN 04 A-2	Downstream effects of HPV integration on survival in HNSCC	Sartor M.	USA
HN 04 A-3	What is the most cost-effective HPV-screening method in Eastern-Europe: the example of Slovenia	Jansen E.	Netherlands
HN 04 A-4	Oral cancer screening: experience of Barretos cancer hospital	Nascimento Jr A.	Brazil
HN 04 A-5	Natural history of oral human papillomavirus infection in healthy population: prevalence of oral HPV infection, a global assessment, the progress study	Morais E.	France
HN 04 A-6	Diagnostic accuracy of HPV-DNA/p16INK4a double positivity in non-oropharyngeal head and neck cancer: results from the ICO international study Discussion	Mena M.	Spain

HN 04 B	HPV and Oropharynx / Head & Neck Cancer (submitted papers) Chair: L. Licitra (Italy)		Room Poulenc 17:00 - 18:30
HN 04 B-1	Genetic heterogeneity in OPSCC revealed by single-cell RNA sequencing	Mints M.	Israel
HN 04 B-2	Improved detection of promising epigenetic biomarkers for head and neck cancer in saliva	Hums A-B.	Germany
HN 04 B-3	FGFR3 mutations are less common in HPV- TSCC/BOTSCC	Ursu R. G.	Romania
HN 04 B-4	Antitumor effects in vitro of FGFR and PI3K inhibitors on human papillomavirus positive and negative tonsillar and base of tongue cancer cell lines	Kostopoulou O.	Sweden
HN 04 B-5	Vaccinia virus as tools for the treatment of HPV lesions in larynx	Rosales R.	Mexico
HN 04 B-6	Role of hypoxia's factors in oropharyngeal squamous cell carcinoma (OSPC): a digital approach Discussion	Russo D.	Italy

HN 05	Head & Neck Forum - Surveillance for recurrent HPV Chair: H. Mirghani (France)		Room Poulenc 8:00 - 9:30
HN 05-1	What would you do if identified high-risk individual in terms of diagnostics?	Fakhry C.	USA
HN 05-2	Plasma circulating Tumor HPV DNA for early detection of cancer recurrence in HPV-associated oropharyngeal cancer	Chera B.	USA
HN 05-3	HPV antibodies and risk of recurrence	Lang Kuhs K.	USA
HN 05-4	Oral HPV Discussion	Rettig E.	USA

HN 06	Molecular characterization / Emerging biomarkers of HPV positive OPSCC Chair: J. Zevallos (USA)		Room Poulenc 9:30 - 11:00
HN 06-1	Single cell sequencing analysis of HPV positive OPSCC	Puram S.	USA
HN 06-2	HPV ctDNA quantification and characterization	Bratman S.	Canada
HN 06-3	Molecular characteristics by smoking	Zevallos J.	USA
HN 06-4	A sensitive and specific marker for HPV+ oropharyngeal cancer that occurs up to 20 years before disease onset Discussion	Virani S.	France

Coffee / Lunch break		11:00 - 14:00	
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HN 07	HPV and RRP: confronting the challenge of a rare disease Chair: S. Best (USA)		Room Poulenc 14:00 - 15:30
HN 07-1	RRP in the wild: tracking treatment and natural history	Amin M.	USA
HN 07-2	Clinical consensus building for the use of systemic Avastin in RRP	Mudd P.	USA
HN 07-3	Coordination of patient advocacy groups for the monitoring of systemic Avastin	Best S.	USA
HN 07-4	RNA sequencing for target genetic markers in pediatric RRP Discussion	De Alarcon A. Allen C.	USA USA

Coffee break		15:30 - 16:00	
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HN 08	HPV and oropharynx / Head & Neck cancer (submitted papers)	Room Poulenc 16:00 - 17:30	
Chair: S. Best (USA), J. Lacau St. Guily (France)			
HN 08-1	Role of latent Infection in HPV induced disease of the head and neck	Shikowitz M.	USA
HN 08-2	A simple, rapid, multiplex, isothermal amplification assay for detection and genotyping of human papillomaviruses in formalin-fixed paraffin-embedded tissues	Chen X.	USA
HN 08-3	HPV-capture in oropharyngeal squamous cell carcinoma : is episomal HPV16 a marker of bad prognosis?	Veyer D.	France
HN 08-4	Association of HPV Infection and p16 expression in oral cancer: a multicenter study in Thailand	Iamaroon A.	Thailand
HN 08-5	Artificial Intelligence and oral brush sampling for microbiologic diagnosis in general dental practice, a new entity towards efficient explainable cytology	Runow Stark C.	Sweden
HN 08-6	Estimating the prevalence of oropharyngeal squamous cell carcinomas from human papillomavirus status in the USA by combining machine learning with bayesian inverse modelling	Tewari P.	Ireland
HN 08-7	ECHO [Epidemiology of HPV infection in oral cancer in Ireland]	Martin C.	Ireland
HN 08-8	Saliva testing head and neck cancer: detection of bacterial DNA, HPV and VOC in stabilized selft collection kit Oncoral	Chaubron F.	Switzerland
HN 08-9	Epidemiology of, and risk factors for oral human papillomavirus infections among sexually active Nigerian females	Morhason-Bello I.	Nigeria

MSS - MAIN SCIENTIFIC SESSIONS

MSS 01 **Ecology of HPV in the post vaccination era** **Room Prince Pierre**
 Chair: E. Franco (Canada), M. Lehtinen (Finland) **8:00 - 9:30**

The scientific session "Ecology of HPV in the post-vaccination era" seeks to understand the new population biology between oncogenic human papillomaviruses and their human hosts following the strong selective pressure of prophylactic HPV vaccination. The plenary lecture of Melanie Drolet on the prerequisites of anticipated changes in HPV ecology is followed by presentations by David Mesher, Joe Tota and Penelope Gray of respectively observational, individually randomized and community-randomized studies on HPV type-replacement in vaccinated populations, vaccinated individuals and unvaccinated individuals, who are under substantial herd effect. The empirical data will be compared for modeling predictions of Irene Man and Ville Pimenoff about estimating changes.

MSS 01-1	Population-level impact of HPV vaccination programs on vaccine and non-vaccine HPV type sets the stage for changes in HPV ecosystem	Mesher D.	UK
MSS 01-2	Systematic review of analyses of HPV type-replacement following vaccination programs	Mesher D.	UK
MSS 01-3	Evaluation of HPV type-replacement in HPV vaccination trials	Tota J.	USA
MSS 01-4	HPV type-replacement in populations following girls-only and gender-neutral vaccination	Gray P.	Finland
MSS 01-5	Mathematical modeling of HPV type-replacement	Man I.	Netherlands
MSS 01-6	Differential HPV diversity and distribution in the pre- and post-vaccination era Discussion	Pimenoff V.	Spain

MSS 02 **New triage approaches for HPV-positive women, what is the evidence?** **Room Prince Pierre**
 Chair: J. Dillner (Sweden), N. Wentzensen (USA) **9:30 - 11:00**

Primary HPV screening is being widely introduced world-wide. While a negative HPV test provides great reassurance against cervical precancer and cancer, a positive HPV test requires additional triage to decide who needs to be referred for diagnostic evaluation and treatment. Current triage strategies include genotyping for HPV16/18 and cytology, but several new technologies are being evaluated that can improve the clinical performance compared to current standards. This session will summarize the most important novel triage strategies and show the latest data and developments.

MSS 02-1	Extended HPV genotyping	Wright T.	USA
MSS 02-2	Viral methylation	Clarke M.	USA
MSS 02-3	Host DNA methylation and miRNA	Heideman D.	Netherlands
MSS 02-4	Automated dual stain	Wentzensen N.	USA
MSS 02-5	Individual risk assessment for CIN3 in clinical practice Discussion	Kinney W.	USA

SS - SCIENTIFIC SESSIONS

SS 04 **Wider use of HPV self-sampling in screening programs: current practice** **Auditorium Camille Blanc**
 Chair: H. Berkhof (Netherlands), D. Heideman (Netherlands) **8:30 - 9:30**

Self-collection of vaginal samples for HPV testing is nowadays offered routinely in the national cervical cancer screening program in certain countries, and other countries have started trials to evaluate the approach as an alternative for clinician-based screening. This session will address experiences with self-sampling, with a focus on implementation and acceptability.

SS 04-1	The Netherlands : data from the first country offering women the possibility to self-collect samples for HPV testing	Melchers W.	Netherlands
SS 04-2	Improve study : experience with and performance of HPV self-sampling vs clinician-based sampling in women attending regular cervical screening in the Netherlands	Berkhof H.	Netherlands
SS 04-3	Australia: experience with self-sampling from the national cervical screening program	Brotherton J.	Australia
SS 04-4	Sweden : increasing participation in cervical screening by targeting long-term non-attenders	Elfström M.	Sweden
SS 04-5	HPV self sampling: the picture in England	Lim A.	UK
SS 04-6	Malaysia : experience with self-sampling and roll-out as a national program Discussion	Woo Y. L.	Malaysia

SS 05 **Total protection and durability of the HPV vaccines** **Auditorium Camille Blanc**
 Chair: A. Kreimer (USA) **9:30 - 11:00**

HPV vaccines were approved and licensed more than a decade ago, typically based on four years of data on the protection of the vaccines afforded against histologic endpoints. This session aims to summarize the state of the science on the durability of HPV vaccines, with data from both trial- and implementation-settings, and expanding endpoints assessments to include virologic and immunologic.

SS 05-1	Long-term cross-protection afforded by the bivalent HPV vaccine against histologic HPV 16/18 precancers	Tsang S. H.	USA
SS 05-2	Long-term cross-protection afforded by the bivalent HPV vaccine	Porras C.	Costa Rica
SS 05-3	Bivalent HPV vaccine effectiveness in a real-world setting	Palmer T.	UK
SS 05-4	Long-term protection of quadrivalent and nonavalent HPV vaccine against histologic HPV16/18 precancers and effectiveness in a real-world setting	Garland S.	Australia
SS 05-5	Long-term protection by the nonavalent HPV vaccine Discussion	Joura E.	Austria

SS - SCIENTIFIC SESSIONS

SS 06	Cervical cancers screening and immunization in low and middle income countries Chair: J-P. Bogers (Belgium), J. Smith (USA)	Room Van Dongen 8:00 - 9:30	
SS 06-1	Use of self-sampling as a screening method in LMIC	Lorincz A.	UK
SS 06-2	Screening and vaccination implementation in Eastern and Central Europe – part of Europe with highest burden of cervical cancer	Poljak M.	Slovenia
SS 06-3	ETICCS network in Africa	Von Knebel Döberitz M.	Germany
SS 06-4	WAKA experience: working together to beat cancer	Bogers J-P.	Belgium
SS 06-5	Hurdles of setting up lab capacity for HPV screening in LIC	Abebe T.	Ethiopia
SS 06-6	Updates on HPV vaccines – a global perspective Discussion	Dull P.	USA

SS 07	First void urine as a biomarker source for primary and secondary cancer prevention Chair: A. Vorsters (Belgium), R. Steenbergen (Netherlands)	Room Van Dongen 9:30 - 11:00	
<p>Today more interest is being directed towards the use of self-sampling methods. During this workshop we will discuss recent developments and achievements with first-void urine as biomarker source for primary and secondary cancer prevention.</p>			
SS 07-1	The rationale and potential of using urine samples in cervical cancer screening and HPV vaccination programs	Vorsters A.	Belgium
SS 07-2	Use of HPV DNA in urine for follow-up of HPV vaccination. Impact data from Rwanda and Bhutan	Baussano I.	France
SS 07-3	Detection of HPV vaccine-induced antibodies in cervicovaginal secretions in first-void urine	Pattyn J.	Belgium
SS 07-4	VALHUDES: Validation of human papillomavirus assays and collection devices for HPV testing on first-void urine samples	Van Keer S.	Belgium
SS 07-5	Human methylation markers detectable in urine	Steenbergen R.	Netherlands
SS 07-6	Accuracy of hrHPV testing on urine samples Discussion	Peeters E. Arbyn M.	Belgium Belgium

CS - CLINICAL SESSIONS

CS 01	The best strategies to prevent and to follow women after conisation for CIN3 Chair: S. Garland (Australia), J. Paavonen (Finland)	Room Auric 8:30 - 9:30
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Treatment for cervical precancer is fallible and follow-up essential. In the past cytology was the test of choice but this lacked sensitivity so FU schedules were varied according to histological factors and necessarily involved frequent and repeated testing. Recurrence of CIN is associated with persistence of hrHPV subtypes. On the basis of a number of studies and meta-analyses it is recognized that the negative predictive value of a single hrHPV test at 6 months after treatment is sufficiently high to enable a return to normal screening intervals. Compared to cytology, HPV testing is less specific and further evaluation, in one form or another is required for positive tests.

	Part A		8:00 - 8:30
CS 01-1	HPV testing as a test of cure – what is the evidence?	Redman C.	UK
	Part B: The challenge of HPV vaccination after treatment		8:30 - 9:30
CS 01-2	Understanding the concept and definition of recurrent cervical squamous intraepithelial lesion (SIL)	Strander B.	Sweden
CS 01-3	Disease burden of recurrent SIL	Kalliala I.	Finland
CS 01-4	HPV testing and discrimination of HPV reinfection	Dillner J.	Sweden
CS 01-5	Design of clinical trials of post-treatment HPV vaccination Discussion	Kyrgiou M.	UK

CS 02	Risk and prevention of cervical cancers in post-menopausal women Chair: P. Gravitt (USA)	Room Auric 9:30 - 11:00	
CS 02-1	Review the evidence for cancer and CIN2+ risk in pre- vs. post-menopausal women	Silver M.	USA
CS 02-2	New HPV detection in adult women and men: evidence for new acquisition vs recurrence	Gravitt P.	USA
CS 02-3	Clinical experience in management of HPV-screened birth cohorts previously screened with cytology	Hammer A.	Denmark
CS 02-4	Effect of screening in post-menopause	Sasieni P.	UK
CS 02-5	Strategies for prevention of cervical cancers in post-menopausal women Discussion	Lindström A.	Sweden

MSS - MAIN SCIENTIFIC SESSIONS

MSS 03 **Pro-Con session - hot topics** **Room Prince Pierre**
 Chair: E. Franco (Canada), T. Wright (USA) **14:00 - 15:30**

Point/Counterpoint or Pro/Con debates have been a popular type of scientific session in EUROGIN congresses since the 1990's. They capture the arguments on opposing sides of controversial or hot topics in HPV science and its practical aspects, such as vaccination, cervical cancer screening, and disease etiology. The session in 2019 will showcase debates between camps on five key areas: (I) elimination of cervical cancer, (II) the future of cytology, (III) the meaning of HPV-negative cervical cancers, (IV) age to exit cervical cancer screening, and (V) earliest observation of the impact of vaccination on cervical cancer incidence.

MSS 03-1	Can we eliminate cervical cancer? • Yes • No	Giuliano A. Tota J.	USA USA
MSS 03-2	Will cytology eventually go to the dustbin of cervical cancer history? • Yes • No	Meijer C. Wright T.	Netherlands USA
MSS 03-3	HPV-negative cervical cancers: are they worse clinically? • Yes • No	Jenkins D. Aleman L.	UK Spain
MSS 03-4	Should women over 65 exit cervical cancer screening? • Yes • No	Malagon T. Hammer A.	Canada Denmark
MSS 03-5	Has vaccination already reduced cervical cancer incidence? • Yes • No Discussion	Bosch X. Lehtinen M.	Spain Sweden

Coffee break

15:30 - 16:00

MSS 04 **Vaccinating adult women and men – a new challenge
for populations at risk**
Chair: X. Bosch (Spain)

**Room Prince Pierre
16:00 - 17:30**

From the early HPV vaccine indications in 2006-2007 (girls only, single cohorts, age below 15 / before sexual initiation, three doses required ...) the vaccine indications gradually expanded based on either results of formal trials (male vaccination, widening of the age range, HIV cohorts, MSM, other high risk groups...) or based on clinical observations and educated interpretation of the evidence outside formal RCT (vaccination as adjuvant to treatments for CIN2+ or as part of the management of recurrent respiratory papillomatosis). These novel indications translate the underlying observations that 1) HPV vaccines are highly effective also in adult individuals 2) HPV vaccinated women are predicted to reduce dramatically their lifetime screening requirements increasing the cost effectiveness of the programs 3) HPV vaccines are safe and do not have any formal contraindications. 4) reaching vaccination coverage levels above 50% of the female population generates a very powerful herd protection effect 5) the HPV carriers (i.e. some 10% of the female population and likely much higher among males) are the main source of novel HPV infections and the explanation for the high prevalence observed in virtually all surveys of the general populations. The value of vaccinating HPV carriers in reducing HPV transmission is an important objective to further expand the indications of HPV vaccination.

MSS 04-1	Review evidence from clinical efficacy trials	Garland S.	Australia
MSS 04-2	Review evidence from population effectiveness studies of CIN2+ incidence by age at vaccination	Silverberg M.	USA
MSS 04-3	Review evidence for effectiveness of post-CIN treatment vaccination	Joura E.	Austria
MSS 04-4	The impact of HPV viral latency on vaccine effectiveness - evidence from modeling Trends in sexual behaviour in the British	Van Schalkwyk C.	South Africa
MSS 04-5	population: insights from the National Surveys of Sexual Attitudes and Lifestyles (NATSAL) Discussion	Sonnenberg P.	UK

Methylation: from molecular biology to clinical practice
MSS 05 A - Part A **Room Prince Pierre**
17:30 - 18:10
 Chair: J. Doorbar (UK), M. Von Knebel Döberitz (Germany)

In this course we aim to highlight key regulatory functions of epigenetic modifications of the HPV genome during the normal viral life cycle of papillomaviruses in the differentiating squamous epithelium as well as the critical role of aberrant methylation events of the viral genome in the initiating phase of transforming HPV infections. These recent findings have important implications for innovative diagnostic tools as well as they position HPV triggered epithelial lesions as key target indications for epigenetic therapy approaches. Three talks will discuss these subjects.

MSS 05 A-1	Epigenetics in HPV caused cancers	Steenbergen R.	Netherlands
MSS 05 A-2	Viral epigenome and its implication in viral gene expression regulation	Von Knebel Döberitz M.	Germany
MSS 05 A-3	Therapeutic implications of demethylating drugs Discussion	Prigge E-S.	Germany

Methylation: from molecular biology to clinical practice
MSS 05 B - Part B **Room Prince Pierre**
18:10 - 19:00
 Chair: A. Lorincz (UK)

A general characteristic of progressing epithelial precancers is increasingly diverse and large changes in methylation. DNA methylation biomarker panels are highly reproducible and easy to measure from biopsies, exfoliated cells and body fluids. For HPV-related diseases methylation tests show very good performance and have many advantages versus other triage methods, providing simultaneous information on both diagnosis and prognosis. This session will explore progress in the biology of DNA methylation, the growing impetus for methylation-based triage algorithms and prospects for routine commercial methylation tests.

MSS 05 B-1	Performance of a cocktail HPV DNA methylation test with 12 or more types	Clarke M.	USA
MSS 05 B-2	Routine DNA methylation testing in Colombia, is it feasible?	Sánchez G.	Colombia
MSS 05 B-3	Results of the Qiasure DNA methylation test in routine use	Meijer C.	Netherlands
MSS 05 B-4	Performance of the GYNTECT methylation assay in triage of HPV positive women	Dürst M.	Germany
MSS 05 B-5	Is the S5 DNA methylation test useful as a predictor of CIN3 and cancer in HPV-infected women?	Lorincz A.	UK
MSS 05 B-6	HPV triage – longitudinal studies on host DNA methylation Discussion	Heideman D.	Netherlands

CS - CLINICAL SESSIONS

CS 03 **LLETZ** **Room Auric**
Chair: C. Redman (UK) **14:00 - 15:30**

The session is a multi-faceted review of LLETZ that will consider how and when to perform this procedure and its place in modern colposcopy.

CS 03-1	Teaching LLETZ procedure	Cruickshank M.	UK
CS 03-2	When to treat?	Kalliala I.	Finland
CS 03-3	How to do a proper LLETZ? Depth, problems, etc.	Redman C.	UK
CS 03-4	Select and treat. Indications, evidence	Redman C.	UK
CS 03-5	Follow-up after LLETZ: post LLETZ treatment, TOC, need for colposcopy, cancer Discussion	Aro K.	Finland

Coffee break 15:30 -16:00

CS 04 **HPV assays from practice to research development** **Room Auric**
Chair: M. Poljak (Slovenia) **16:00 - 17:30**

The enormous number of commercial HPV assays on the market complicates choosing the best test for different clinical applications as well as for epidemiological studies and research purposes. The session will provide a global overview of commercially available HPV tests, as well as a summary of those considered clinically validated for primary screening. Quality control requirements for HPV testing and clinical performance of HPV tests on alternative specimens will be also reviewed. Finally, next generation HPV tests currently in the pipeline or in late phase development will be presented.

CS 04-1	Global overview of commercially available HPV tests: 2019 update	Poljak M.	Slovenia
CS 04-2	Validation rules for HPV tests with genotyping capacity	Xu L.	Belgium
CS 04-3	Quality control requirements for HPV testing	Cuschieri K.	UK
CS 04-4	Clinical performance of HPV tests on alternative specimens	Vorstens A.	Belgium
CS 04-5	Next generation HPV tests: what is in the pipeline and what is not (and we desperately need)? Discussion	Franco E.	Canada

CS 05	Age to start and to stop screening and how it will change with HPV Chair: P. Georgi Rossi (Italy)	Room Auric 17:30 - 19:00
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The introduction of HPV testing and the changing epidemiology of HPV infections due to vaccination require re-thinking the definition of the screening target age: at what age should we start screening, in vaccinated and non-vaccinated women? When should we stop screening in women who had a negative HPV test? In this session both modelling studies and insights from cancer and screening registries from different European countries will be used to answer these questions.

CS 05-1	When to start and stop screening with Pap and HPV: models for policy decision making	Malagon T.	Canada
CS 05-2	When to start and stop screening with HPV testing: the importance of the knowledge on the natural history of the disease	Baussano I.	France
CS 05-3	How data from cancer registries can help to define the age to start and stop screening	Lynge E.	Denmark
CS 05-4	Age to start and stop screening: the UK experience	Sasieni P.	UK

SS - SCIENTIFIC SESSIONS

SS 08	Effect of HIV on HPV and related cancers Chair: A. D'Souza (USA), M. Shiels (USA)	Auditorium Camille Blanc 17:30 - 19:00
SS 08-1	Cervical and anal cancer epidemiology among PLWH	Shiels M. USA
SS 08-2	HIV-related immunodeficiency, ART use and the risk of HPV-associated cancer: focus on effect of CD4, HIV and ART on CIN2+, AIN2+ and HPV-associated cancers	Silverberg M. USA
SS 08-3	Updates on optimal cervical cancer screening among HIV infected women and other immunocompromised women: focus on guidelines, nuances, prevention/vaccine, practitioners' view, common Q&A	Moscicki A-B. USA
SS 08-4	Updates on optimal anal pre-cancer screening among PLWH: Focus on anal disease screening, presentation, practitioners view, common Q&A Discussion	Stier E. USA

FC - FREE COMMUNICATIONS

FC 09	HPV prophylactic vaccines (III) Chair: K. Pollock (UK)	Auditorium Camille Blanc 14:00 - 15:30
FC 09-1	Efficacy of AS04-adjuvanted HPV-16/18 vaccine in reducing oropharyngeal HPV infections in adolescent girls – results from a community-randomized trial	Lehtinen M. Finland
FC 09-2	HPV vaccination after conization: a systematic review and meta-analysis	Hillemans P. Germany
FC 09-3	The impact of prophylactic vaccination on HPV elimination in women after surgical treatment of HSIL	Przybylski M. Poland
FC 09-4	Effectiveness of HPV vaccine in women undergoing LEEP for cervical dysplasia	Muresu N. Italy
FC 09-5	Healthcare resource utilization after cervical conization: 2 year follow-up from a large United States claims database	Kothari S. USA
FC 09-6	Reduction in CIN3+ at second and subsequent screens in women immunised with Cervarix®	Palmer T. UK
Coffee break		15:30 - 16:00

FC 10	HPV screening (I) Chair: J. Peto (UK), G. Ronco (Italy)	Auditorium Camille Blanc 16:00 - 17:30
FC 10-1	Using population-level cervical cancer screening data to develop personalised screening algorithms	Nygård M. Norway
FC 10-2	Reducing false positive referrals in HRHPV positive women within the Dutch cervical cancer screening programme: a modelling study	Kaljouw S. Netherlands
FC 10-3	Three-year cumulative incidence rates of cervical neoplasia during the longitudinal phase of the Onclarity trial stratified by extended genotyping	Wright T. Columbia
FC 10-4	Predict and prioritize: detection of CIN3 lesions up to 5 years before their development using a methylation classifier	Peto J. UK
FC 10-5	Risk of high-grade lesions after atypical glandular cells in cervical and HPV screening	Norman I. Sweden
FC 10-6	Cancer cases identified in a randomized implementation of HVP screening in the Norwegian cervical cancer screening programme	Engesæter B. Norway
FC 10-7	Evaluation of population-based primary HPV cervical screening: 3 years after implementation	Bergengren L. Sweden
FC 10-8	Registry-based comparison of cervical screening test results in the Nordic countries by test method	Partanen V-M. Finland
FC 10-9	Shifting sands - HPV screening in the post-vaccine era	Vaughan L. USA
FC 10-10	Participation in HPV- and cytology-based cervical cancer screening: results from a Danish implementation study	Thomsen L. T. Denmark

FC 11	Self-sampling (I) Chair: F. Carozzi (Italy), S. Franceschi (Italy)	Room Van Dongen 14:00 - 15:30	
FC 11-1	Possible impact of knowledge about HPV and self-collection in men with unviable biological samples on HPV typing	De Souza F. M. A.	Brazil
FC 11-2	Increased participation in cervical screening among long-term non-attendees by the use of vaginal self-collected samples	Ernstson A.	Sweden
FC 11-3	Survey of the acceptance status of HPV self-sampling in cervical cancer screening population	Zhao Y.	China
FC 11-4	Performance and acceptability of self-collected samples in HPV detection	Sechi I.	Italy
FC 11-5	Feasibility and presumed added value of self-sampling for HPV-based cervical cancer screening using a midwifery network across rural Greece: the GRECOSELF study	Chatzistamatiou K.	Greece
FC 11-6	High risk HPV prevalence among urban Ethiopian women using vaginal self-sampling	Mekuria S.	Sweden

Coffee break	15:30 - 16:00
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FC 12	Public Health / Education (II) Chair: S. Hanley (Japan), M. Nygård (Norway)	Room Van Dongen 16:00 - 17:30	
FC 12-1	Socioeconomic differences in cervical testing within and outside the screening program	Pankakoski M.	Finland
FC 12-2	Perceptions on reasons for PAP and HPV testing among healthcare providers in Finland	Makkonen P.	Finland
FC 12-3	Use of a game-based learning tool to inform the public about HPV and nudge women to attend cervical cancer screening	Campbell S.	Norway
FC 12-4	Distinguishing primary and secondary HPV screening in registry data	Nordqvist Kleppe S.	Sweden
FC 12-5	A German online survey of patients with cin, highlighting the psychological distress during repetitive diagnostics cycles	Schmitz M.	Denmark
FC 12-6	The number and gender of children synergistically impact on mothers' practice of HPV testing and attitudes towards HPV vaccination in Shenzhen, China	Lin W.	China
FC 12-7	A geostatistical algorithm to better identify contextual and clinical factors associated to HPV vaccine coverage in France	Majed L.	France
FC 12-8	Health saving technologies in XXI century – basic concepts of HPV-associated diseases control in the Russian Federation	Konova I.	Russia
FC 12-9	Development and validation of a peer education program for cervical cancer prevention	Katayama K.	Japan
FC 12-10	Women not HPV-vaccinated as children are less likely to be screened as adults	Badre-Esfahani S.	Denmark
FC 12-11	Effect of a coriolus versicolor-based vaginal gel in HPV infected women: cervical reepithelization, perceived stress and tolerability evaluation	Dexeus D.	Spain
FC 12-12	How to achieve HPV-related diseases control in Italy? Recommendations from a consensus conference	De Waure C.	Italy

FC 13	HPV testing and genotyping (II) Chair: J-P. Bogers (Belgium)	Room Van Dongen 17:30 - 19:00	
FC 13-1	Estimating the impact of using an mrna HR-HPV assay compared to dna HR-HPV assays in the English primary HPV cervical screening programme	Adams E.	UK
FC 13-2	Retrospective analysis of HPV genotyping data in cervical cancer screening in Germany	Tiews S.	USA
FC 13-3	High-risk HPV negative cervical intraepithelial neoplasia 2+: a retrospective analysis	Iacobone A. D.	Italy
FC 13-4	Follow-up results from the EVAH study: hrHPV genotyping as a marker of progression to \geq HSIL/CIN2 in a well described cohort	Leeman A.	Netherlands
FC 13-5	Extensive HPV genotyping reveals multiple infections in relation to cervical lesions	Zhong F.	China
FC 13-6	L1 and E6/E7 based assays detect similar levels of HPV in high grade and invasive lesions of the cervix, oropharynx and penis	Cuschieri K.	UK
FC 13-7	Development of a novel, simple, quantitative and comprehensive low-cost HPV and sexually transmitted infections assay using next-generation sequencing	Gharizadeh B.	USA
FC 13-8	Comparative performance of the alinity m HR-HPV assay on thinprep, surepath and alinity m cervi-collect specimens	Chernesky M.	Canada
FC 13-9	When, why and how to test heterosexual men for HPV?	Rago Z.	Hungary

WF - WORKSHOP FRANCOPHONE**CANCERS HPV INDUITS - PROMOUVOIR LA RECHERCHE ET L'ÉDUCATION****L'HPV en pratique clinique, les acquis et attentes**

Coordination : J. Monsonego (France)

WF I	Les cancers HPV induits en France : état des lieux et perspectives Modérateur : J. Lacau St. Guily (France)		Salle Bosio 9:30 - 10:15
WF I-1	Cancer du col	Prétet J-L.	France
WF I-2	Cancer anal	Abramowitz L.	France
WF I-3	Cancer de l'oropharynx	Mirghani H.	France
WF II	Dépistage HPV du cancer du col, nouvelles directions et mise en œuvre en période de transition Modérateur : D. Riethmuller (France)		Salle Bosio 10:15 - 11:30
WF II-1	Quels tests HPV en dépistage incluant l'auto-prélèvement	Arbyn M.	France
WF II-2	La conduite à tenir face à un test HPV positif en dépistage primaire, position de la HAS	Monsonego J.	France
WF II-3	Âge du début et de fin du dépistage : intervalle approprié et évaluation	Bergeron C.	France
WF II-4	Questions concernant l'implémentation du dépistage basé sur l'HPV	Giorgi Rossi P.	Italie
WF II-5	Quel dépistage pour les femmes vaccinées ?	Bouchard C.	Canada
Pause - Accès au congrès EUROGIN			11:30 - 13:30
WF III	Les initiatives françaises (Table ronde) Modérateur : C. Katlama (France)		Salle Bosio 13:30 - 14:30
WF III-1	Réalisations et perspectives du CNR	Prétet J-L.	France
WF III-2	Dépistage HPV – Mise en œuvre	Arbyn M.	France
WF III-3	Programme ITMO cancer – Aviesan	Katlama C.	France
WF III-4	Les recommandations et propositions françaises (CTV, HAS, etc.)	Vié Le Sage F.	France

WF IV	Vaccination HPV, la France dans le monde Modérateur : R. Cohen (France)		Salle Bosio 14:30 - 15:30
WF IV-1	Le point vaccination HPV en 2019 (couverture, profil de sécurité, recommandation et impact)	Cohen R.	France
WF IV-2	Vaccination universelle, où en sommes-nous ?	Vié Le Sage F.	France
WF IV-3	Vaccination post-conisation	Riethmuller D.	France
WF IV-4	Rétablir la confiance	Karafillakis E.	Royaume-Uni
WF V	Les nouveaux enjeux de la communication sur l'HPV Modérateur : E. Karafillakis (Royaume-Uni)		Salle Bosio 15:30 - 16:30
WF V-1	Les femmes survivantes, face à la maladie et leurs combats	Barbier C.	France
WF V-2	Fakenews, mouvements anti-vaccinaux et manipulation de l'opinion, comment rétablir la confiance	Karafillakis E.	Royaume-Uni
WF V-3	Comment s'opposer aux arguments pseudoscientifiques	Franco E.	Canada
WF V-4	Quels conseils aux patients concernés par l'HPV	Smith J.	États-Unis

MSS - MAIN SCIENTIFIC SESSIONS

MSS 06 **Towards cervical cancer elimination: what do we need to know?** **Auditorium Camille Blanc**
 Chair: E. Burger (USA), M. Jit (UK) **8:00 - 9:30**

The Director-General of the World Health Organization Director-General has issued a call for action to eliminate cervical cancer as a public health problem. Since then, there has been widespread consultation, debate and analysis around the topic. This session brings together speakers who are at the heart of the discussion around cervical cancer elimination about the rationale, feasibility, action required and timeline to achieve elimination.

MSS 06-1	Elimination of HPV related cancers: ambitious but achievable, examples of success	Giuliano A.	USA
MSS 06-2	Why did WHO call for cervical cancer elimination? The motivation and the evidence	Baussano I.	France
MSS 06-3	Elimination and eradication: do the differences matter?	Jit M.	UK
MSS 06-4	How soon can we eliminate cervical cancer? Comparative modeling of vaccine and screening options	Burger E.	USA
MSS 06-5	What do we know about cervical cancer incidence in the world today?	Bray F.	France
MSS 06-6	Which will be the first country to eliminate cervical cancer? Discussion	Canfell K.	Australia

Coffee break 9:30 - 10:00

MSS 07 **Artificial intelligence: digital pathology and machine learning applications for precision prevention of cervical cancer** **Auditorium Camille Blanc**
 Chair: J. Monsonogo (France), N. Wentzensen (USA) **10:00 - 11:30**

MSS 07-1	Digital pathology	Grabe N.	Germany
MSS 07-2	Digital cytology for Pap screening, what is the accuracy?	Bergeron C.	France
MSS 07-3	Machine learning	Antani S.	UK
MSS 07-4	Experience from other oncological imaging (breast cancer)	Balleyguier C.	France
MSS 07-5	Artificial intelligence applications for cervical cancer screening Discussion	Wentzensen N.	USA

Lunch break 11:30 - 13:00

CS - CLINICAL SESSIONS

CS 06 **HPV vaccination and use of new technologies in women at high risk of cervical disease** **Room Auric**
 Chair: J. Dillner (Sweden), M. Kyrgiou (UK) **8:30 - 9:30**

With the widespread use of HPV vaccines, the prevalence of vaccine HPV type infections is dropping, in some populations nearing extinction. The two major vaccine types (HPV16/18) are responsible for 70% of cervical cancers and even more in younger screening populations. In highly vaccinated birth cohorts, both cytology and HPV screening will mostly detect the remaining HPV types that have no or very limited potential to cause cancer. For populations without the most oncogenic HPV types, entirely new screening strategies and new screening tests are required.

CS 06-1	Efficacy of HPV vaccination – benefits in women with previous cervical disease	Kyrgiou M.	UK
CS 06-2	HPV vaccination and impact on prevalence cervical disease in Scotland	Cruickshank M.	UK
CS 06-3	Resource stratified approaches combining vaccination and screening	Sasieni P.	UK
CS 06-4	The use of “omics” innovative technologies to optimise management of women with abnormalities at screening	Paraskevaidi M.	UK
CS 06-5	Genetic and epigenetic determinants in cervical cancer Discussion	Bowden S.	UK

Coffee break 9:30 - 10:00

CS 07 **Cervical neoplasia - Stump the expert (Interactive session)** **Room Auric**
 Chair: J. Bornstein (Israel), E. Paraskavaidis (UK) **10:00 - 11:30**

The approach to diagnosing, classifying and treating cervical intraepithelial neoplasia has changed with recent advances. This time, we will present contemporary cases to a panel of experts. The experts' diagnosis and management will be questioned by the moderators and the audience.

CS 03-1	Case presentation	Redman C.	UK
CS 03-2	Case presentation	Shiraz M. A.	UK
CS 03-3	Case presentation	Sui L.	China
CS 03-4	Case presentation Discussion	Lúa Alvarado R.	Mexico

Lunch break 11:30 - 13:00

SS - SCIENTIFIC SESSIONS

SS 09 **Screening for anal cancer precursors in women** **Room Poulenc**
 Chair: L. Abramowitz (France), J. Palefsky (USA) **8:00 - 9:30**

The global incidence of anal cancer incidence is increasing dramatically in HIV-positive women and men who have sex with men (MSM) Others populations are also at increased risk of anal cancer (1-3), including heterosexual HIV-positive men, HIV-negative MSM, immunocompromised people (including solid organ transplantation), and HIV-negative women with a history of vulvar or cervical cancer, and high-grade VIN/ CIN. Guidance based on expert opinion for screening and treating HIV infected MSM for prevention of anal cancer is available but challenging to implement for many reasons (large screening population, loss to follow-up, long learning curve for high resolution anoscopy, limited availability of resources, limitations of screening technologies and treatment methods, etc. The incidence of anal cancer will likely decrease in the future among vaccinated individuals, but many at-risk individuals will not have been vaccinated and will benefit from cervical screening and probably anal screening. This session focuses on anal cancer prevention in women: what does the current data tell us regarding best practices for anal cancer prevention in at-risk women? Who should be screened? What are the optimal screening methods and algorithms? What do we know about the efficacy of treatment for anal high-grade squamous intraepithelial lesions to prevent anal cancer in women?

SS 09-1	Anal cancer in women - who is at risk?	Shiels M.	USA
SS 09-2	Anal HPV and anal squamous intraepithelial lesions in women - a global perspective	Moscicki A-B.	USA
SS 09-3	Optimal approaches to screening for anal squamous intraepithelial lesions in women	Stier E.	USA
SS 09-4	The ANCHOR study	Palefsky J.	USA

SS 10 **Cervical screening of vaccinated birth cohorts** **Room Van Dongen**
 Chair: J. Bonde (Denmark), C. Cuschieri (UK) **10:00 - 11:30**

Relevance: HPV vaccinated cohorts represent a challenge to both cytology and HPV based screening. How to approach and overcome this challenge to secure the best screening of HPV vaccinated women.

SS 10-1	Australia	Canfell K.	Australia
SS 10-2	Denmark	Waldstroem M.	Denmark
SS 10-3	Norway	Nygård M.	Norway
SS 10-4	How will cervical screening in the UK change over the next 25 years?	Castanon A.	UK
SS 10-5	Sweden	Elfström M.	Sweden
SS 10-6	Design and Implementation of screening programs for vaccinated cohorts Discussion	Malagon T.	Canada

FC - FREE COMMUNICATIONS

FC 14	HPV screening (II) Chair: A. Castanon (UK), M. Stoler (USA)	Room Van Dongen 8:00 - 9:30	
FC 14-1	Quality assurance of HPV tests and triage cytology: lessons from Australia	Llewellyn H.	UK
FC 14-2	The possible role of cytology at 12-month recall in primary cervical screening with HR-HPV	Burroni E.	Italy
FC 14-3	HPV screening and reproducibility of triage cytology: revision of negative Triage Pap test from women with CIN2+ lesion at 1 year follow-up	Cannistrà S.	Italy
FC 14-4	Triaging HPV positive women with low-grade cytology: evidence from 10 year follow-up of the artistic trial cohort	Gilham C.	UK
FC 14-5	Performance of HPV16/18 genotyping as a triage test of HPV positive women in Latin America	Rol M. L.	France
FC 14-6	Clinical value of p16 immuno-cytology in cervical cancer screening: a population-based study	Yan P.	China
FC 14-7	Combined use of cytology, p16 immunostaining and genotyping for triage of women positive for high risk human papillomavirus at primary screening	Adcock R.	UK
FC 14-8	Approaches to triage optimization in HPV primary screening: extended genotyping and p16/ki67 dual-stained cytology - retrospective insights from Athena	Stoler M.	USA
FC 14-9	Dual staining for p16/ki-67 to detect high-grade cervical lesions: results from the screening triage ascertaining intraepithelial neoplasia by immunostain testing (stain-it) study	El-Zein M.	Canada
FC 14-10	Comparison of p16/ki67 dual staining and E6/E7 mRNA overexpression as triage test in HPV DNA-positive women: accuracy and prognostic value	Giorgi Rossi P.	Italy
FC 14-11	Clinical validation of broom vs brush/spatula collected cytology for asc-us triage by HPV testing using a molecular HPV test: results from the Impact trial	Wright Jr T. C.	USA
Coffee break			9:30 - 10:00

FC 15	Self-sampling (II) Chair: W. Melchers (Netherlands)		Room Bosio 8:00 -9:30
FC 15-1	Hasco study protocol: German pilot study for systematic HPV self sampling for non-responders	Jentschke M.	Germany
FC 15-2	Ladymed HPV test: a new home-based self-sampling service to increase cervical cancer screening participation	Avian A.	Italy
FC 15-3	Non-invasive methylation test to detect cervical pre-cancer in self-collected vaginal and urine specimens	Nedjai B.	UK
FC 15-4	Home self-sampling to enhance uterine cervical cancer screening, vaginal or first-void urine? A comparative multicentre study	Payan C.	France
FC 15-5	Determination of the optimal volume first-void urine to be collected (and evaluation of internal control) for the detection of viral and host biomarkers	Téblick L.	Belgium
FC 15-6	Accuracy of HPV testing on vaginal and urine self-samples to predict residual/recurrent disease in women treated for high-grade cervical dysplasia (test of cure)	Martinelli M.	Italy
FC 15-7	HPV detection in urine samples collected using Copan's Urisponge™ versus clinician-collected cervical samples	Castriciano S.	Italy
FC 15-8	Comparison of realtime high risk HPV results from vaginal self-sampled swabs and physician-collected preservcyt samples	Benoy I.	Belgium

Coffee break

9:30 - 10:00

FC 16	Self-sampling (III) Chair: O. Forslund (Sweden), C. Payan (France)		Room Bosio 10:00 -11:30
FC 16-1	HPV self-sampling as a routine offer to screening non-responders in the capital region of Denmark	Møller Ejegod D.	Denmark
FC 16-2	Self-sampling among long-term non-attenders to cervical cancer screening in Norway: a pragmatic randomized controlled trial	Aasbø G.	Norway
FC 16-3	Urinary HPV DNA testing as a tool for cervical cancer screening in France: an update of the CAPU3 study	Pivert A.	France
FC 16-4	HPV prevalence and genotyping frequencies in screening non-attenders accepting HPV self-sampling	Pedersen H.	Denmark
FC 16-5	Feasibility and triage study of HPV genotyping of self-sampling cervical cancer screening on internet-based in China	Li J.	China
FC 16-6	High risk HPV status in first void urine collipee samples versus physician-collected cervical specimens determined by a PCR-based clinically validated screening test	Vanden Broeck D.	Belgium
FC 16-7	A new self collection Quick Brush device for primary smear and HPV test, designed on the same principle that periodic tampon with applicator (medium size). Comparison results for morphological changes and HPV testing	Phamtrong P.	France

Lunch break

11:30 -13:00

FC 17	Molecular markers (I) Chair: T. Broker (USA), K. Cuschieri (UK)		Room Lifar 8:00 -9:30
FC 17-1	Performance of combinations of biomarkers as triage for HPV-DNA positive women in cervical cancer screening	Venturelli F.	Italy
FC 17-2	First results from the VALHUDES study: use of first-void urine for cervical cancer screening	Van Keer S.	Belgium
FC 17-3	Interobserver reproducibility of p16ink4a/ki67 dual staining in HPV positive women in the screening population from the NTCC2 study	Mancuso P.	Italy
FC 17-4	Cervical cancer screening in vaccinated women: will p16/ki67 dual staining be an option for triaging HPV positive women in a population without HPV 16 or HPV 18 infection?	Carozzi F.	Italy
FC 17-5	MEK/ERK signaling is a critical regulator of high-risk human papillomavirus oncogene expression revealing therapeutic targets for HPV-induced tumors	Ozbun M.	USA
FC 17-6	Use of p16/ki67 for triage of cervical intraepithelial neoplasia II-III in patients infected with high risk type of human papilloma virus (HPV)	Srisuttayasathien M.	Thailand
FC 17-7	Molecular profiling as a triage for hrHPV positive women	Andralojc K.	Netherlands
FC 17-8	HPV DNA in the blood of cervical cancer patients – clinical implications?	Bønløkke S.	Denmark
FC 17-9	HPV genomics and cancers	Nicolas A.	France
FC 17-10	Validation of targeted next generation sequencing panel for HPV-genotyping in cervical cancer	Lippert J.	Denmark

Coffee break

9:30 - 10:00

FC 18	Anal neoplasia Chair: A. Nyitray (USA), E. Stier (USA)		Room Lifar 10:00 - 11:30
FC 18-1	Screening for anal HPV in MSM and follow up after treatment for anal condiloma	Figueiredo M. N.	Brazil
FC 18-3	The utility of digital anal rectal examinations (DARE) in a public health screening program for anal cancer	Nyitray A.	USA
FC 18-4	Low prevalence of high-risk anal HPV in young gay and bisexual males after the universal HPV vaccination program in Australia: findings from the HYPER2 study	Chow E.	Australia
FC 18-5	Prevalence of HPV and sexual health among sex workers and men who have sex with men: a protocol study	Maranhão A. G. K.	Brazil
FC 18-6	The prevalence of high-risk HPV DNA and mRNA in anal pap smears from an outpatient population of hiv-positive men who have sex with men in Ireland	Kerr C.	Ireland
FC 18-7	A blood-based tumor marker for the early detection and monitoring of HPV-induced anal cancer in HIV-patients	Huber A.	Germany
FC 18-8	Prognostic significance of HPV DNA and p16ink4a in anal cancer: a systematic review and meta-analysis	Urbute A.	Denmark

Lunch break

11:30 - 13:00

FC 19	Colposcopy / Management (I) Chair: M. Cruickshank (UK)		Room Poulenc 10:00 -11:30
FC 19-1	Training colposcopists using an online teaching course in association with mobile colposcopy with quality control	Singer A.	UK
FC 19-2	Colposcopic changes of the cervix and high-risk HPV association	Villanueva B.E.	Mexico
FC 19-3	Colposcopic impression in a birth cohort previously eligible for HPV-vaccination	Sahlgren H.	Sweden
FC 19-4	Reproductive and oncological outcomes after treatment for CIN: a systematic review and network meta-analysis	Athanasidou A.	UK
FC 19-5	HPV test of cure (TOC) for treated cin in 34,000 women - an analysis of seven years' national data from Scotland	Palmer T.	UK
FC 19-6	ANYPLEX II HPV genotyping performance in the CIN2+ management at baseline and follow-up after surgical treatment	Bottari F.	Italy
FC 19-7	Effectiveness of a multi-ingredient coriolus versicolor-based vaginal gel in repairing cervical mucosa with HPV lesions. Interim analysis results of an observational study	Cortés J.	Spain
FC 19-8	Evaluating the performance of an artificial intelligence classifier on a colposcopy population	Homola W.	Poland
Lunch break			11:30 - 13:00

MSS - MAIN SCIENTIFIC SESSIONS

MSS 08 **Challenges for HPV self-sampling as primary screening tool in organized cervical screening** Auditorium Camille Blanc
 Chair: M. Elfström (Sweden), S. Van Dijk (Netherlands) **14:15 - 15:45**

HPV-tests on self-samples were introduced for non-responders of the national screening program. Now, the Netherlands are exploring options of a wider use of self-sampling in the Dutch cervical cancer screening program. There are quite some challenges to overcome before self-sampling can be a primary screening tool, like validation of HPV tests on self-samples and triage on self-samples. That's what this session will be about.

MSS 08-1	Experiences and challenges for self-sampling in Denmark	Bonde J.	Denmark
MSS 08-2	Challenges for primary self-sampling in the Netherlands	Van Dijk S.	Netherlands
MSS 08-3	Clinical validation of HPV tests on self-sampling (HPV tests/ brushes/medium/etc) on his meta-analyses review publication	Arbyn M.	Belgium
MSS 08-4	Challenges for triage Discussion	Heideman D.	Netherlands

Coffee break

15:45 - 16:15

MSS 09 **Cervical screening programs from a flow-chart point of view** Auditorium Camille Blanc
 Chair: J. Bonde (Denmark), A. Tropé (Norway) **16:15 - 17:45**

How to best utilize HPV screening with the many new options this technology offers?
 In this session, screening algorithms from different countries will be presented along with the reasons for the choices made showing how HPV, genotyping, cytology and other methods are combined to provide better cervical cancer screening

MSS 09-1	The Swedish screening program	Dillner J.	Sweden
MSS 09-2	The Norwegian screening program	Tropé A.	Norway
MSS 09-3	The Dutch screening program	Van Dijk S.	Netherlands
MSS 09-4	The Danish screening program	Bonde J.	Denmark
MSS 09-5	The Scottish screening program	Palmer T.	UK
MSS 09-6	The Australian screening program	Brotherton J.	Australia
MSS 09-7	The Italian screening program	Carozzi F.	Italy

MSS 10 Risk-based HPV screening: switching from one-size-fits-all programs to personalized screening programs Auditorium Camille Blanc
17:45 - 19:15
Chair: H. Berkhof (Netherlands), G. Ogilvie (Canada)

Molecular based screening for cervical cancer is now well established as offering improved detection and greater protection for women for pre-cancerous lesions. However, significant unanswered questions remain as to how to optimize screening programs for women with different risk profiles. In this session, leaders in the field will provide reflections on the current thinking on risk based screening with molecular testing for HPV.

MSS 10-1	E-health and M-health platforms to facilitate risk-based cervical screening	Dillner J.	Sweden
MSS 10-2	Towards fully molecular risk stratification	Meijer C.	Netherlands
MSS 10-3	Risk based screening - the US experience	Wentzensen N.	USA
MSS 10-4	When to start screening after vaccination? Intermediate results of a Finnish randomized trial	Lehtinen M.	Finland
MSS 10-5	Epimetheus - an open source platform for risk-based modeling Discussion	Baussano I.	France

SS - SCIENTIFIC SESSIONS

SS 11 Control of high-risk HPV transmission in clinical practice Room Van Dongen
Chair: J. Doorbar (UK) 14:15 - 15:45

Recent studies on virus transmission have shown that human papillomaviruses - which are shed from the epithelial surface in exfoliating squames - are resistant to desiccation in the environment and that effective disinfection procedures must be implemented to inactivate them in clinical settings. Unlike many viruses however, the methodologies for measuring infectious HPV titres are not yet well developed, with the current disinfection protocols used to inactivate HPVs, being drawn to a large extent, from the study of other virus families that have different survival and transmission characteristics.

The session will examine the effectiveness of the common agents that are currently used to inactivate HPV and HPV-contaminated medical implements - in order to allow development of an evidence based approach to HPV inactivation that adequately addresses the possibility of indirect transmission in the clinic.

SS 11-1	Health care associated transmission of infectious agents	Wilson P.	UK
SS 11-2	Papillomavirus stability and the efficiency of disinfection strategies	Egawa N.	UK
SS 11-3	Nosocomial papillomavirus transmission: current controversies in the field	Meyers C.	USA
SS 11-4	Papillomavirus entry, inhibition and approaches for quality management Discussion	Ozbun M.	USA

Coffee break

15:45 - 16:15

SS 12	Therapeutic options for low-risk HPV infection and disease Chair: S. Best (USA), C. Lacey (UK)	Room Van Dongen 16:15 - 17:45	
SS 12-1	Overview of therapeutic drugs for benign and neoplastic HPV lesions	Broker T.	USA
SS 12-2	Laser and adjuvant therapy for low-risk HPV disease	Cuming T.	UK
SS 12-3	Is there a role for L1 VLP vaccines in the treatment of low-risk HPV disease?	Lacey C.	USA
SS 12-4	Vaccinia virus as tools for the treatment of HPV lesions in larynx	Rosales R.	Mexico
SS 12-5	Update on the development of HPV L2 based vaccines	Best S.	UK
SS 12-6	Prospects for direct HPV antivirals Discussion	Broker T.	USA

SS 13	Immune responses to HPV infection Chair: K. Louvanto (Finland)	Room Van Dongen 17:45 - 19:15	
SS 13-1	The role of HLA -alleles and host immunity	Louvanto K.	Finland
SS 13-2	HPV serology – antibodies after natural HPV infection versus antibodies after HPV vaccinations	Eklund C.	Sweden
SS 13-3	Modulation of antigen presenting cell functions during chronic HPV infection	De Vos Van Steenwijk P.	Netherlands
SS 13-4	Cell mediated immunity and HPV persistence	Bonagura V.	USA
SS 13-5	Early HPV infection and immune recognition Discussion	Louvanto K.	Finland

CS - CLINICAL SESSIONS

CS 08 **Management / Colposcopy** **Room Auric**
 Chair: J. Bornstein (Israel), D. Jenkins (UK) **13:00 - 14:15**

This session will critically examine the traditional approach to diagnosis and management of cervical abnormalities at the colposcopy clinic and discuss the appropriate integration of HPV genotyping and biomarkers' use in different clinical situations, and the way they are reflected in the different guidelines.

CS 08-1	Can we make pathological diagnosis less subjective and variable?	Jenkins D.	UK
CS 08-2	Role of biomarkers for the clinician in colposcopy: is there a place in the day to day practice?	Paraskevaidis E.	Greece
CS 08-3	Revision of different guidelines in colposcopy (France, USA, Canada, etc.)	Bornstein J.	Israel
CS 08-4	Management of cervical abnormalities in pregnancy	Bouchard C.	Canada
CS 08-5	The value of HPV genotyping in colposcopy practice Discussion	Wentzensen N.	USA

CS 09 **Treatment of anal cancer precursors** **Room Auric**
 Chair: A. Nyitray (USA), M. Einstein (USA) **14:15 - 15:45**

Treatment of cervical precancers is highly efficacious in preventing the development of cervical cancer. It is not known if treatment of anal precancers will prevent the development of anal cancer. This session will focus on investigation of treatment approaches for HPV infection and anal neoplasia including therapeutic vaccines, ablation, and topical approaches.

CS 09-1	Host cell DNA methylation markers for the detection of HGAIN and anal cancer	Steenbergen R.	Netherlands
CS 09-2	Novel therapeutic agents for anal HPV and anal squamous intraepithelial lesions	Einstein M.	USA
CS 09-3	Ablative approaches for treatment of anal HPV and anal squamous intraepithelial lesions	Abramowitz L.	France
CS 09-4	Topical approaches for treatment of anal HPV and anal squamous intraepithelial lesions Discussion	Stier E.	USA

Coffee break

15:45 - 16:15

CS 10 **Microbiome** **Room Auric**
 Chair: A-B. Moscicki (USA) **16:15 - 17:45**

The microbiome plays a critical role in human health and disease. Microbial dysbiosis has been shown to be associated with inflammation which can be helpful in control of HPV. On the other hand, prolonged inflammation is associated with cancerous changes. Of the mucosal sites, the cervical-vaginal environment has been the most often studied-but mostly with cross-sectional studies. Longitudinal studies are more likely to be more informative. Few studies have attempted to examine the association between HPV outcomes and the anal or oral microbiome. This session will examine longitudinal studies of the cervical microbiome as well as anal and oral microbiomes and HPV outcomes.

CS 10-1	Anal microbiome	Palefsky J.	USA
CS 10-2	Oral microbiome	Goodman M.	USA
CS 10-3	Cervico-vaginal microbiome CIN2 clearance	Kyrgiou M.	UK
CS 10-4	CIN2 clearance	Mitra A.	UK
CS 10-5	HPV regression vs progression to CIN2 Discussion	Moscicki A-B.	USA

CS 11 **How to act against fake news, anti-vaccination movements and manipulation of public opinion** **Room Auric**
 Chair: E. Karafillakis (UK), M. Nygård (Norway) **17:45 - 19:15**

In 2019, the WHO declared vaccine hesitancy one of the top ten threats to global health. The spread of misinformation around HPV vaccination, facilitated by digital and social media, has contributed to an amplification of public concerns, particularly about the safety of the vaccine. This session will discuss the impact of digital and social media on HPV vaccine hesitancy and strategies that can be implemented to manage and respond to misinformation online.

CS 11-1	Digital and social media: the importance of listening to the public	Karafillakis E.	UK
CS 11-2	Responding to anti-vaccination content on digital and social media: whose responsibility?	Milne C.	UK
CS 11-3	Messaging done right: how to communicate around HPV vaccination	Simas C.	UK
CS 11-4	Navigating digital and social media to reach different populations	Tropé A.	Norway
CS 11-5	Using digital and social media as a positive tool to respond to public concerns Round table discussion	Pollock K.	UK

FC - FREE COMMUNICATIONS

FC 20	Molecular markers (II) Chair: M. Von Knebel Döberitz (Germany)	Room Bosio 14:15 - 15:45	
FC 20-1	LOXL2 expression status correlates with molecular characterization of cervical carcinoma and associates to poor cancer survival via epithelial-mesenchymal transition (EMT) phenotype	Cao C.	China
FC 20-2	HPV DNA integration site as proof of the origin of ovarian metastasis from endocervical adenocarcinoma: three case report	Jeannot E.	France
FC 20-3	Genome wide-association study of Cervical Cancer in the UK Biobank cohort	Bowden S.	UK
FC 20-4	A novel approach of spatial preservation of cervical surface cells and the generation of biomarker cervicograms	Shiraz M. A.	UK
FC 20-5	Comparison of the performance of DNA methylation markers for the early detection of cervical lesions between Dutch and Chinese colposcopy cohorts	Wisman B.	Netherlands
FC 21/22	Methylation (I) Chair: W. Quint (Netherlands), B. Hesselink (Netherlands)	Room Bosio 16:15 - 18:45	
FC 21/22-1	Surveillance of young HPV-positive women below age of 30 by FAM19A4/miR124 methylation: a multi-center European cohort study	Hesselink B.	Netherlands
FC 21/22-2	Validation of HPV16 e2bs3&4 methylation as independent from global host-genome methylation and its relation to clinical endpoints in a cohort of OPSCC patients	Kalteis M. S.	Germany
FC 21/22-3	Analysis of diagnostically relevant DNA methylation marker regions in cervical cancer and its precancerous lesions using next generation sequencing	Dippmann C.	Denmark
FC 21/22-4	Genome-wide DNA methylation profiling identifies two novel genes in cervical neoplasia	El-Zein M.	Canada
FC 21/22-5	A novel PAX1 methylation gene for prediction the cervical cancer: multi-center clinical research program and previous validation results	Wang H.	China
FC 21/22-6	Epigenetic markers allowing for early risk determination for cervical neoplasia and cancer	Hansel A.	Germany
FC 21/22-7	A new methylation marker assay as triage test to improve cervical cancer screening	Van Rijk A.	Canada
FC 21/22-8	Cervical pre-cancer vs invasive cancer: molecular differentiation with potential of improving cervical cancer screening	Banila C.	UK
FC 21/22-9	The use of human papillomavirus DNA methylation in cervical intraepithelial neoplasia: a systematic review and meta-analysis	Bowden S.	UK
FC 21/22-10	Interest of methylation test on women with high-risk HPV and abnormal cytology	Taar J. P.	France

FC 23	Colposcopy / Management (II) Chair: W. Kinney (USA)	Room Poulenc 17:45 - 19:15	
FC 23-1	Application value of the ZNF582 methylation gene for colposcopy unsatisfactory patients: patients with transformation zone type 3	Zhang Y.	China
FC 23-2	Detection of VIN, VAIN and AIN in an HPV based screening program (wolphscreen) and patients views on colposcopic evaluation of the vulva	Ganzer A.	Germany
FC 23-3	Defining elimination of genital warts - a modified delphi study	Khawar L.	Australia
FC 23-4	Genital warts in pregnancy-diagnosis and treatment the most common cause of laryngeal paillomatosis in children under 10 years old	Jeremic I.	Serbia
FC 23-5	Laser assisted Rapid Evaporative Ionisation Mass Spectrometry (REIMS) as a bedside screening tool for cervical cancer	Paraskevaidi M.	UK
FC 23-6	Effect of a coriolus versicolor-based vaginal gel in a high-risk HPV infected patients. results of different studies	Seydoux G.	Spain
FC 23-7	Incidence of cervical cancer and other malignancies after treatment of cervical intraepithelial neoplasia: a systematic review and meta-analysis	Athanasidou A.	UK

SS - SCIENTIFIC SESSIONS

SS 14 **HPV based screening for cervical cancer** **Room Auric**
 Chair: K. Canfell (Australia), P. Georgi Rossi (Italy) **8:00 - 9:30**

The session affords some of the hottest topics for new cervical cancer screening based on HPV testing. Which test should be used and how should it be combined with cytology? In a scientific and practice community dedicated to public health interventions, guidelines can only change after consolidated evidence has been accumulated, but at the same time technology and research push for continuous changes and improvements of the interventions. This session gives a picture of how evidences are evolving and recommendations are evolving in cervical cancers screening programs.

SS 14-1	Update of the evidence: HPV alone vs cotesting	Ogilvie G.	Canada
SS 14-2	DNA vs RNA tests: update of the evidence	Forslund O.	Sweden
SS 14-3	Which HPV tests are validated for cervical cancer screening	Arbyn M.	Belgium
SS 14-4	Who is doing what: several countries that have introduced HPV screening or that have defined their future policies Discussion	Giorgi Rossi P.	Italy

SS 15 **Validation of HPV assays for primary screening** **Room Auric**
 Chair: M. Arbyn (Belgium), F. Carozzi (Italy) **9:30 - 11:00**

SS 15-1	VALGENT 4 protocol, validation of HPV assays using SurePath samples	Bonde J.	Denmark
SS 15-2	What is a good HPV16/18 genotyping test?	Poljak M.	Slovenia
SS 15-3	Validation of HPV assays through international co-operation and biobanks	Cuschieri K.	UK
SS 15-4	Validation of assays included in VALGENT 4: the Liferiver Harmonia test	Xu L.	Belgium
SS 15-5	HPV-Risk assay	Hesselink B.	Netherlands
SS 15-6	A comparison between BD Onclarity, Roche Cobas, Agena MassArray HPV and Genomica CLART HPV4	Ejegod D.	Denmark
SS 15-7	New criteria for HPV test validation Discussion	Arbyn M.	Belgium

SS 16 **Update on next generation sequencing research** **Room Auric**
 Chair: L. Mirabello (USA) **11:00 - 12:30**

SS 16-1	HPV methylation	Nedjai B.	UK
SS 16-2	HPV integration	Yeager M.	USA
SS 16-3	HPV genome sequencing	Mirabello L.	USA
SS 16-4	MicroRNA marker discovery by genome-wide small RNA sequencing in HPV positive self-samples	Snoek B.	Netherlands
SS 16-5	Understanding HPV biology & infection: Insights from NGS Discussion	Doorbar J.	UK

FC - FREE COMMUNICATIONS

FC 24	HPV prophylactic vaccines (IV) Chair: L. Boey (Belgium), S. Hanley (Japan)	Room Van Dongen 8:00 - 9:30	
FC 24-1	Comparing HPV vaccination modeled CIN3+ outcomes with real-world evidence	Postma M.	Netherlands
FC 24-2	Safety of the nine-valent HPV vaccine (Gardasil®9) in transplant and HIV patients	Boey L.	Belgium
FC 24-3	Efficacy, Safety, and Immunogenicity of an Escherichia coli produced bivalent human papillomavirus vaccine: an interim analysis of a randomized clinical trial	Wei L.	China
FC 24-4	Reduction in vaccine HPV type infections in young women five years after HPV vaccine introduction in Colombia	Combita A. L.	Columbia
FC 24-5	Reduced HPV vaccination schedule and the risk of genital warts – a population-based study	Baandrup L.	Denmark
FC 24-6	Implementation of HPV Vaccination in a private women health clinic in Lebanon: feasibility and demographics	Jaafar I.	Lebanon
FC 24-7	Vaccination against human papillomavirus in West Africa: experience from Senegal	Gassama O.	Senegal

FC 25	Viral and molecular biology Chair: M. Yeager (USA)	Room Van Dongen 9:30 - 11:00	
FC 25-1	Polymorphism of TP53 as the background of persistent human papillomavirus infection	Kldiashvili E.	Georgia
FC 25-2	Diagnostic accuracy of ZNF582 hipermethylation for cervical cancer precursor lesions: systematic review and meta-analysis	Rosa M. I.	Brazil
FC 25-3	HPV-CCDC106 integration alters local chromosome architecture and hijacks an enhancer by remodelling the 3D genome structure in cervical cancer	Cao C.	China
FC 25-4	HPV-positive cervical carcinoma cells - the effects of HPV copy number and irradiation on the invasion in the human myoma tissue based extracellular matrix models	Tuominen H.	Finland
FC 25-5	Protamine sulfate potently reduces HPV infection by preventing attachment to heparan sulfate proteoglycans	Ozbun M.	USA
FC 25-6	Therapeutic implications of demethylating drugs	Prigge E-S.	Germany
FC 25-7	The effect of demethylation on proliferation and signaling pathways of cervical cancer cells	Li M.	China
FC 25-8	Inhibition of HPV-18 DNA replication by Novan-1000, a novel nitric oxide releasing compound, in epithelial tissue cultures of PHKs	Broker T.	USA

FC 26	Immunology Chair: C. Lacey (UK), K. Louvanto (Finland)	Room Van Dongen 11:00 - 12:30	
FC 26-1	HPV 16/18 – specific memory b-cell responses in women 8 years after vaccination	Lacey C.	UK
FC 26-2	Impaired monocyte/immature Langerhans cell function, increased PGE2 expression, and skewed HPV6/11 adaptive immunity in RRP	Bonagura V.	USA
FC 26-3	The immune landscape is a strong predictive biomarker for clinical outcome in early stage vulvar cancer, irrespective of HPV or p53 status	Kortekaas K.	Netherlands
FC 26-4	High levels of monocytic myeloid derived suppressor cells expressing arginase 1 and loss of TCR- ζ chain in CD4+ and CD8+ T lymphocytes increase the risk of high-grade cervical intraepithelial lesions in hrHPV+ women	Sánchez G.	Columbia
FC 27	HPV screening (III) Chair: A. Hammer (Denmark), A. Tropé (Norway)	Room Bosio 8:00 - 9:30	
FC 27-1	Primary human papillomavirus cervical cancer screening algorithm using onclarity with integrated 16/18 genotyping: baseline and three-year trial results	Stoler M.	USA
FC 27-2	New cervical cancer screening protocol for women vaccinated before screening age: preliminary data from the “consensus” study	Carozzi F.	Italy
FC 27-3	Crude and attributable risks of CIN3+ detection following multiple rounds of HPV testing at kaiser permanente Northern California	Hammer A.	Denmark
FC 27-4	Retrospective analysis of HPV genotyping data in cervical cancer screening in Germany	Tiews S.	USA
FC 27-5	Genotype-specific, persistent human papillomavirus infection is associated with increased cumulative incidence rate for high-grade cervical disease: three-year longitudinal data from the Onclarity trial	Andrews J.	USA
FC 27-6	Human papillomavirus load and genotype-specific prediction of invasive cervical cancer	Hortlund M.	Sweden
FC 27-7	Gradual implementation of HPV screening in Norway: randomisation and real-world evidence	Engesæter B.	Norway

FC 28	HPV screening (IV) Chair: C. Eklund (Sweden)		Room Bosio 9:30 - 11:00
FC 28-1	Psychological effect of cervical cancer screening when changing primary screening method from cytology to high-risk human papilloma virus testing	Andreassen T.	Norway
FC 28-2	HPV 31 baseline performance and risk determination for high-grade cervical disease by onclarity detection	Devin G.	USA
FC 28-3	DNA vs RNA tests: update of the evidence	Forslund O.	Sweden
FC 28-4	Human papillomavirus testing as exit test for cervical cancer screening at age 60-64 years: a Danish register-based study	Schroll J. B.	Denmark
FC 28-5	Libuse trial - algorithm for cervical cancer screening in the Czech Republic with USAge of HPV dna testing with HPV 16/18 genotyping and p16/ki-67 dual-stained cytology	Slama J.	Czech Republic
FC 28-6	Russian first HPV primary screening program in the republic of bashkortostan in action	Olkov I.	Russia
FC 28-7	Clinical evaluation of alinity m HR HPV assay in population-based cervical cancer screening setting	Oštrbenk Valenčak A.	Slovenia

FC 29	Screening methods Chair: D. Ejegod (Denmark)		Room Bosio 11:00 - 12:30
FC 29-1	Expanding the upper age limit for cervical cancer screening- a nationwide cohort study	Tranberg M.	Denmark
FC 29-2	Comparison of co-testing and primary HPV screening strategies in a population-based study of 2,627 women aged 30 years and above	Liang L. A.	Germany
FC 29-3	Clinical value of p16 immuno-cytology in cervical cancer screening: a population-based study	Yan P.	China
FC 29-4	Preliminary data from a Swedish self- sampling study in postmenopaUSAI women	Helenius G.	Sweden
FC 29-5	Primary HPV screening and cervical cytology in HIV-negative and HIV-positive South African women	Botha M. H.	South Africa
FC 29-6	Evaluation of folate receptor-mediated tumor detection as a triage tool for cervical cancer screening	Zhao Y.	China
FC 29-7	Impact of HPV status knowledge on cytology revision (co-test cohort)	Cunha A.	Portugal

CP - COLPOSCOPY COURSE

CP	Colposcopy Course	<i>Separated registration required</i>	Room Poulenc
	Organized in conjunction with the European Federation for Colposcopy (EFC)		14:15 - 17:45
	Coordinator: A. Singer (UK)		
CP 1	14:15 - 14:45 The normal cervix and the colposcopy examination	Singer A.	UK
<p>Colposcopy is the visual examination of the epithelial cervix using either uni or binocular vision. Specific abnormalities associated with both squamous and glandular precancer can be identified especially after the application of a 5% acetic acid solution. After this application the abnormalities become visible as a result to changes in the epithelium and blood vessels in the stroma. These changes occur within an area of the cervix called the transformation zone, an area bounded by the junction of vaginal epithelium and the glandular epithelium arising from the endocervix (canal). Within this area a change occurs in which and glandular epithelium changes to squamous by a process of transformation, called metaplasia. The upper border of this metaplastic change is called the new squamo columnar junction. The inability to see this junction means that abnormality may exist higher up in the endo cervix.</p> <p>A sample of any abnormality within the transformation zone can be taken by a simple punch biopsy. Abnormality extending into the endocervix above the new squamo columnar junction will need a limited surgical excision of the endocervix. Colposcopy is an essential part of the diagnosis and treatment of cervical precancer. It is indicated in the presence of abnormal cytology or in the finding of a positive HPV report and also when there are clinical symptoms and signs of the early invasive cancer.</p>			
CP 2	14:45 - 15:15 Update of pathology and cytology for colposcopists	Bergeron C.	France
<p>As molecular evidence increased and was carefully correlated with epidemiologic studies, it is now clear that CIN 1 (e.g. mild dysplasia, usually with koilocytes) represents the histologic correlate for productive HPV infection, while CIN2 (at least for some) but definitely CIN3/CIS are identified as a morphologic indication of HPV oncogene-induced cell transformation. This understanding leads to the return of a binary risk-based managerial approach to cervical pathology: CIN1 lesions are considered low-grade squamous intraepithelial lesions (LSIL) and managed with observation, whereas CIN2/CIN3/CIS lesions are lumped together as high-grade squamous intraepithelial lesions (HSIL) and warranted resection.</p> <p>This two-tiered risk schema informed the Bethesda classification system for cervical cytology, first introduced in 1988 and refined 3 times, most recently in 2014. In 2012, the Lower Anogenital Squamous Terminology (LAST) project further advocated for the use of LSIL/HSIL terminology not only in the uterine cervix, but also elsewhere in the male and female genital tracts, as did the 4th edition of the World Health Organization's text on gynecologic neoplasia. Thus today, we have a unified, biologically based terminology for both cytology and histology that extends to the whole spectrum of cervical neoplasia and helps to guide management.</p>			
CP 3	15:15 - 15:45 Colposcopy of "abnormal" cervix	Singer A.	UK
<p>The epithelium containing squamous precancer within the transformation zone has certain characteristics. These reside within the epithelium or in the presence of blood vessels penetrating the epithelium and existing in the underlying stroma. The epithelium when painted with a solution of 5% acetic acid takes on a white appearance due to the obstruction of reflected light from the underlying stroma due to the cellularity of the epithelium. This epithelium is now called aceto-white epithelium and has all degrees of whiteness from a partially translucent appearance to one with extreme white denseness. The blood vessels can appear as red spots on the white epithelial background and this change is called punctuation. Likewise a mosaic appearance in the epithelium is also associated with abnormality and is called mosaic change. Both changes are as a result of increasing epithelial vascularity. An extreme form of this vascularity is called atypical vessel formation where the previous regularity in the blood vessels (punctuation and mosaic) now becomes extreme in structure and adopts a marked irregularity, usually is indicative of possibly early invasive cancer (microinvasion).</p>			

Coffee break

15:45 - 16:15

CP 4 **16:15 - 16:45**
The accuracy of colposcopy: how can we make it better? **Redman C.** **UK**

Colposcopic performance is multifactorial and very much depends on context. A variety of studies have shown variable accuracy and concerns have been expressed about its sensitivity to detect HSIL in the presence of LSIL cytology. The prevalence of HSIL is a major determinant in PPV and this will inevitably fall in primary HPV screening, especially if the population is vaccinated. In addition to high quality colposcopy based on training and quality assurance, performance might be improved using adjunctive colposcopic technologies.

A fundamental role of activity in women with abnormal screening results is to make an accurate assessment of the cervix. A number of studies, both cross-sectional and prospective, indicate that whilst colposcopic performance compares favorably with other diagnostic tests, it lacks sensitivity and specificity. It is evident that a number of factors have to be considered: the number of biopsies taken, the prevalence of high grade disease in group being studied and the quality of training. These aspects are reviewed and strategies to improve performance are discussed.

CP 5 **16:45 - 17:15**
The value of biomarkers in colposcopy practice **Bergeron C.** **France**

p16 immunohistochemistry is the most widely enlisted biomarker in the uterine cervix and in the HPV-related neoplasia in general. Biologically high grade lesions, e.g. true precancers are virtually always p16 positive. The LAST recommendations therefore advocate for p16 application in all cases of suspected CIN2 as a way of minimizing CIN2 cases as well as cases with a differential diagnosis of CIN3 vs. benign (atrophy, squamous metaplasia, etc.). Although the diagnostic value of p16 immunohistochemistry in the uterine cervix is well-established in these scenarios, p16 falters when it comes to prognostication and is not considered a reliable prognostic marker in LSIL histological cases.

Using a combination of antibodies to detect p16 and the cell cycle marker Ki67 identifies HPV-transformed cervical cells. The clinical performance of this approach has been evaluated in the triage of ASC-US and LSIL cytology results and more recently in HPV-primary screening. Cytology informed of HPV positivity is more expected to perform better than predicted by trials and could possibly allow longer intervals before retesting HPV-positive women with normal cytology. Alternative triage strategies like combining genotyping (16/18 only vs extended genotyping) with cytology, p16/ki67 dual stain ICC or methylation analyses are all under active evaluation for optimization of the balance between immediate referral vs deferred assessment of HPV positive women. Sensitive than blind cytology. Screening programs with informed cytology triage are expected to perform better than predicted by trials and could possibly allow longer intervals before retesting HPV-positive women with normal cytology. Alternative triage strategies like combining genotyping (16/18 only vs extended genotyping) with cytology, p16/ki67 dual stain ICC or methylation analyses are all under active evaluation for optimization of the balance between immediate referral vs deferred assessment of HPV positive women.

CP 6 **17:15 - 17:45**
Towards the safe and accurate treatment of cervical precancer **Redman C.** **UK**

Colposcopy decisions are inherently based on judgement, hopefully underpinned by a sound understanding of the context and disease processes. Treating cervical pre cancer involves achieving a balance between effectiveness and the avoidance of needless harm. Factors associated with colposcopic accuracy (case mix, number of biopsies, training and quality assurance) and ways of improving performance are considered.

Local cervical treatment in women with suspected cervical precancer is relatively easy to do but can have appreciable morbidity, especially on both future childbearing and the ability to accurately perform adequate follow-up tests. It is important that colposcopists consider when treatment is needed and how it can be undertaken in such a way as to be effective but avoid over-treatment. This encompasses issues such as depth of excision, avoidance of needless treatment especially in younger women whose cervical disease may be self-limiting. These issues will be addressed on the basis of extant evidence with recommendations for safe practice.




GR - IMPROVING GENITAL QUALITY OF LIFE IN HEALTHY WOMEN AND FOLLOWING HPV RELATED CANCER - The role of Genital Restoration

GR 01	Improving genital quality of life in healthy women and following HPV related cancer		Room Lifar 14:00 - 14:55
GR 01-1	General Introduction	Berreni N.	France
GR 01-2	New technologies in genital restoration - applications to functional and plastic gynecology	Berreni N.	France
GR 01-3	How to improve vaginal health	Elia D.	France
GR 01-4	Vaginal health in athletic woman	Mares P.	France
GR 01-5	Sexuality of women in elegant age dysfunctions and treatment	Bonneau M.	France
GR 01-6	Regenerative medicine : How far we are!	Goiris M.	Italy
GR 02	Tissue action mechanisms and therapeutic interest of laser technologies		Room Lifar 15:00 - 15:45
GR 02-1	Immunocellular action mechanisms of HPV and clinical consequences of laser rejuvenation	Moscicki A-B.	USA
GR 02-2	Microbiote, flora and HPV	Mares P.	France
GR 02-3	Tissue action mechanisms of lasers	Salvatore S. Gambacciani M.	Italy Italy
Coffee break			15:45 - 16:15

GR 03	Mechanisms of tissue actions and therapeutic interests of laser technologies practical applications		Room Lifar 16:15 - 17:15
GR 03-1	Lasers and cervical dysplasia	Leshunov E.	Russia
GR 03-2	Lasers and conisations	Mares P. Bonneau M.	France France
GR 03-3	Lasers and genital restoration - Photothermal tissue reconstruction in modern gynecological practice	Teterina T.	Russia
GR 06-4	My indications and my protocols	Elia D.	France

GR 04	Vulvovaginal pain and sexual dysfunction in the oncological therapeutic course		Room Lifar 17:15 - 18:15
GR 04-1	Treatment protocols of vulvo-vaginal atrophy	Mares P.	France
GR 04-2	Why injectables in gynecology ? Place of Hyaluronic Acids	Couchourel D.	France
GR 04-3	Why injectables in gynecology ? My indications and my protocols	Berreni N.	France
GR 04-4	Why lasers and LEDs in gynecology ? Mechanism of actions	Benichou L.	France
GR 04-5	Why lasers and LEDs in gynecology ? Interests in Gynecology	TBD	
GR 04-6	Why lasers and LEDs in gynecology ? Hormones and light	Mantzourani T.	UK

GR - IMPROVING GENITAL QUALITY OF LIFE IN HEALTHY WOMEN AND FOLLOWING HPV RELATED CANCER - The role of Genital Restoration

GR 05	 Plastic reconstruction surgery after surgery after vulvovaginal and anal cancer		Room Lifar 8:30 - 9:15
GR 05-1	Flap surgery and combined gestures (Video I)	Brambilla M.	Italy
GR 05-2	Flap surgery and combined gestures (Video II)	Feron G. Angeles M.	France France
GR 06	 Medicine and regenerative surgery		Room Lifar 9:15 - 10:15
GR 06-1	Place of Hyaluronic Acids	Berreni N.	France
GR 06-2	Place of PRP	Leshunov E.	Russia
GR 06-3	Place of fat and stem cells	Brambilla M.	Italy
GR 07	 Videos of demonstrations by laboratories with experts comments (lasers, injectables, EBD, etc.)		Room Lifar 10:15 - 11:15
GR 08	Round Table		Room Lifar 11:15 - 12:15

P 02 Epidemiology and natural history

P 02-1	Retrospective analysis of the tracking of the uterine cervix cancer on women under 25 years old, during 5 years, made in Valença city, state of Rio de Janeiro Brazil	Silveira F.	Brazil
P 02-2	Preliminary analysis on the genetic diversities of high-risk human papillomaviruses in Chinese women	Ou Z.	China
P 02-3	Prevalence of abnormal Pap smear and detection of intraepithelial cervical lesions in a population of women who participated in a campaign for cervical cancer prevention at Buenos Aires´ University Hospital	Fleider L. A.	Argentina
P 02-4	The clinical significance and utility of HPV-DNA testing in Korean women with atypical glandular cells in cervical Pap tests: An analysis of 311 cases at a single institution	Jang T-K.	South Korea
P 02-5	Head and neck cancer and cervical cancer detection in Russia	Briko N.	Russia

P 04 Immunology

P 04-1	Epithelial stromal cross talk in HPV/HIV infection	Sibeko S.	South Africa
P 04-2	The concentrations of FAS/APO-1 antigen in HeLa cell lines incubated with retinol	Darmochwal-Kolarz D.	Poland

P 05 HPV prophylactic vaccines

P 05-1	Long-term immunogenicity and effectiveness of the 9-valent HPV (9vHPV) vaccine in preadolescents and adolescents	Olsson S. E.	Sweden
P 05-2	Understanding confidence in human papillomavirus vaccine in Japan: a web-based questionnaire survey of mothers, female adolescents, and health care professionals	Shuto M.	Japan
P 05-3	Continuing evolution of gender-neutral HPV vaccination: an update on national immunization programs and evidence gaps associated with GNV policy development and program implementation	Morais E.	France
P 05-4	Immunogenicity and safety of a 9-valent human papillomavirus vaccine in Vietnamese males and females (9-26 years of age): an open-label, phase 3 trial	Group T.	USA
P 05-5	HPV vaccine acceptance among women aged 25 to 45 in Slovenia: results of the coheahr study	Šterbenc A.	Slovenia
P 05-6	Reasons for participation in a HPV vaccine dose reduction clinical trial in sub-Saharan Africa: Does dose matter?	Watson-Jones D.	Tanzania
P 05-7	Changes the past decade after the introduction of the human papillomavirus (HPV) vaccine in cervical HPV prevalence at a youth clinic in Stockholm, Sweden	Dalianis T.	Sweden

P 08	HPV testing		
P 08-1	Risk factors for type-specific persistence of human papillomavirus and recurrence of cervical intraepithelial neoplasia after conization	Min K. J.	South Korea
P 08-2	Comparison of two commercial HPV testing assays for detection of high-risk HPV in head and neck fine-needle aspiration biopsy specimens	Guo M.	USA
P 08-3	Do multiple versus single HPV infections have a greater oncogenic potential in the etiopathogenesis of cervical intraepithelial lesions II+?	Zivadinovic R.	Serbia
P 08-4	Prevalence of HPV types among women in Vojvodina - Distribution of HPV among healthy population	Milosevic V.	Serbia
P 08-5	Study of HPV infectivity of women with cervical pathologies	Zakhirova N.	Uzbekistan
P 08-6	Multi-Site Comparative Study of the BD COR™ System and the BD Viper™ LT System Using the BD Onclarity™ HPV Assay	Greene W.	USA
P 08-7	Papilloplex: Development of a stand-alone solution for the screening of High Risk, Low Risk HPV as well as detection of mRNA expression for triage in cervical cancer screening.	Fu G.	UK
P 08-8	Multi-site evaluation of the BD COR™ System using the BD Onclarity™ HPV assay with specimens collected in BD Surepath™ media and preservcyt solution	Von Bredow B.	USA
P 08-9	Low-cost POC for the detection and genotyping of high-risk HPV suitable for low resourced settings	Murton H.	UK

P 09	HPV screening		
P 09-1	Basic study of whether detection of HPV-DNA in the first-void urine is useful as a marker of cervical HPV infection	Wada T.	Japan
P 09-3	Can colposcopy be delayed for HPV positive women with normal to low risk cytology?	McGauran M.	Australia
P 09-4	Accuracy of mRNA HPV and DNA hrHPV tests compared in pairs for cervical cancer screening: a systematic review and meta-analysis	Macedo A. C.	Brazil
P 09-5	HPV and cervical cancer - screening and vaccination strategies in Romania	Mitran M.	Romania
P 09-6	HPVpro study: comparison of HPV detection in cervical and cervicovaginal swabs	Koudelakova V.	Czech Republic
P 09-7	Differences in risk between vaccinated and unvaccinated women against human papillomavirus and herd immunity: towards a personalized screening approach	Naslazi E.	Netherlands
P 09-8	Application of the self-sampling diagnostic test for evaluation of human papillomavirus in women	Apolikhina I.	Russia

P 10 Self-sampling

P 10-1	A cervical cancer screening theory of change using Fuzzy Cognitive Mapping with Inuit women in Nunavik, Northern Quebec, Canada	Brassard P.	Canada
P 10-2	Self-sampling for HPV testing in elderly women	Hermansson R.	Sweden
P 10-3	Performance evaluation of INNO-LIPA® HPV genotyping extra II on first-void urine	Riems N.	Belgium
P 10-4	Evaluation of HPV testing with Papillocheck® on Floqswabs® self-collected samples	Gruenbart D.	Austria
P 10-5	Women attending routine screening who test hrHPV negative on a self sample are at very low risk of disease over 5 years; lessons from the PaVDAg cohort	Stanczuk G.	UK
P 10-6	Standardized and volumetric collection of first-void urine for detection of STIs and HPV: A comparison between Colli-Pee® and a standard urine cup	Meers N.	Belgium
P 10-7	Acceptability and accuracy of cervical cancer screening using a self-collected veil for HPV DNA testing by multiplex real-time PCR among adult women in sub-Saharan Africa	Mboumba Bouassa R-S.	France

P 11 Genotyping

P 11-1	Evaluation of p16/Ki-67 Dual Staining Compared with HPV Genotyping in Anal Cytology with Diagnosis of ASC-US for Detection of High-Grade Anal Intraepithelial Lesions	Mekki Y.	France
P 11-2	Genotyping of human papillomavirus (HPV) in a healthy patient population and in patients with suspected cervical intraepithelial neoplasia	Pruski D.	Poland
P 11-3	Prevalence of sexually transmitted infections among women living in remote areas along the amazon rivers - Brazil	Zonta M. A.	Brazil
P 11-4	Evolutionary prevalence of different human papillomavirus genotypes from uteri cervix smears in France : a regional experience of a laboratory using the clart® HPV test (Genomica - Madrid - Spain) between 2014 and 2018	Giovannelli G.	France

P 12 Molecular markers

P 12-1	Performance of p16/ki67 immunostaining as a screening tool for colposcopy in women presenting with low grade intraepithelial lesion at cervical cytology	Galvão A.	Portugal
P 12-2	Prognostic value of FISH hybridization technique in cervical cancer patients	Kudela E.	Slovakia
P 12-4	Episomal HPV16 and aggressive metastatic anal squamous cell carcinoma: molecular description by HPV Capture technology coupled with next generation sequencing; a case report	Wack M.	France
P 12-4	Immunohistochemistry markers in the diagnosis of H-SIL	Dimitriadi T.	Russia

P 13 Screening for women difficult to reach

P 13-1	Implementation of primary and secondary cervical cancer prevention in the Regional center of cervical pathology	Dimitriadi T.	Russia
P 13-2	Prevalence of CIN2+ among ASCUS smears in Isère department	Garnier A.	France
P 13-3	Organized vs. opportunistic Screening: a Portuguese oncology centre experience	Martins L.	Portugal
P 13-4	HPV prevalence and HPV-related dysplasia in elderly women	BergLindström A.	Sweden

P 17 Methylation

P 17-1	DNA methylation analysis in HPV-positive screening samples from women 30-69 years in the cervical cancer-screening program in Örebro, Sweden - a pilot study	Kaliff M.	Sweden
P 17-2	The methylated PAX1 gene used as follow up biomarker for cervical intraepithelial neoplasia and cervical cancer treatment	Xie R.	China

P 18 Microbiome

P 18-1	Cervical microbiota in women with cervical intra-epithelial neoplasia, prior to and after local excisional treatment, a Norwegian cohort study	Wiik J.	Sweden
P 18-2	Relationship between vaginal microbiota and HPV infection	Tatti S. A.	Argentina

P 20 New technologies

P 20-1	The causes for dual p16/ki-67 evaluation false results on conventional smears	Kloboves Prevodni V.	Slovenia
P 20-2	An infectious pseudovirion of HPV with thymidine kinase as a tool of gene therapy	Ito R.	Japan

P 22 Diagnostic procedures / management

P 22-1	Towards identification of HPV diagnostic and prognostic biomarkers using machine learning on HPV integration clinical data obtained by molecular combing	Mahé F.	France
P 22-2	Adenosarcoma in cervical polyp	Przybylski M.	Poland

P 23 Colposcopy

P 23-1	Does dynamic spectral imaging colposcopy improve the diagnostic accuracy of cervical dysplasia?	Booth B. B.	Denmark
P 23-2	Effects of orally administered preliminary analgesic therapy in diagnostic colposcopy patients: a prospective questionnaire study	Michail G.	Greece

P 24 Cervical neoplasia

P 24-1	Management of cervical intraepithelial neoplasia 2 in young women	Suh D. H.	South Korea
P 24-2	Case report of an alternative treatment for recurrent cervical and vaginal dysplasia in patient with persistent HPV infection	Šavrora A.	Estonia
P 24-3	Association of a genetic variant in ATP-binding cassette sub-family B member 1 with risk of developing cervical cancer	Hasanzadeh Mofrad M.	Afghanistan
P 24-4	Our experiences with diagnosis and results of cervical pathology treatment	Dörr A.	Czech Republic
P 24-5	Diagnostic performance of p16/ki67 immunostaining in comparison with HPV DNA and mRNA assays to identify high grade cervical intraepithelial neoplasia in women with minor abnormal cytology. The Greek experience	Nasioutzki M.	Greece
P 24-6	New risk factors affecting cervical cancer stage IB in revised FIGO staging	Jung Y.	South Korea
P 24-7	Clear cell carcinoma of cervix: a case series from a single center	Kim Y-T.	South Korea
P 24-8	Trend analysis of cytological abnormalities in opportunistic cervical screening among young women in the Netherlands	Schurink-VanT Klooster T.	Netherlands
P 24-9	Efficacy of collagen sealant for reducing hemorrhage after loop electrosurgical excisional procedure (LEEP)	Kim W. Y.	South Korea
P 24-10	HPV16-associated adenocarcinoma	Pacheco A.	Portugal

P 26 Vulvar diseases and neoplasia

P 26-1	Clinical feature and HPV prevalence in vulvar intraepithelial neoplasia	Jeon S.	South Korea
P 26-2	Prevalence of HPV and p16 expression in vulvar squamous cell carcinoma: a population-based danish study of >1,500 cancers	Thomsen L. T.	Denmark

P 28 Oral HPV infection

P 28-1	Natural history of oral human papillomavirus infection in healthy populations: design of the prevalence of oral HPV infection, a global assessment, the progress study	Morais E.	France
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P 29	HPV and oropharynx / Head and neck cancer		
P 29-1	Genomic characterization of clonal evolution during oropharyngeal carcinogenesis driven by HPV 16	Kim J-H.	South Korea
P 29-2	A retrospective study of intra-arterial chemotherapy with concurrent radiotherapy for resectable locally advanced HPV-positive oropharyngeal carcinoma	Aga M.	Japan
P 29-3	The influence of human papillomavirus on nasopharyngeal carcinoma in Japan	Yoshizaki T.	Japan
P 29-4	Changes in incidence and prevalence of human papillomavirus in tonsillar and base of tongue cancer during 2000-2016 in the Stockholm region and Sweden	Holzhauser S.	Sweden
P 29-5	Ectopic chromosome around centrosome (ECAC) as a potential marker of human papillomavirus (HPV) infection on oropharyngeal carcinoma	Kobayashi E.	Japan
P 29-6	Predictive value of 18F-FDG metabolic tumor volume and total lesion glycolysis for systemic metastasis in tonsil cancer	Kim S-Y.	South Korea
P 29-7	Attributable fraction of HPV related head and neck cancers in the recurrent / metastatic setting. A literature review of PHI-III clinical trials	Athanasopoulos C.	Greece
P 29-8	Familial association of oropharyngeal and anogenital HPV-cancers is calendar-time dependent	Lehtinen M.	Germany
P 29-10	DRH1 - Evaluating a blood-based marker for HPV16-induced tumors	Weiland T.	Austria

P 30	HPV and associated skin diseases		
P 30-1	Determination of caUSAtive human papillomavirus type in histologically confirmed common warts, based on estimated viral loads	Fujs Komloš K.	Slovenia

P 31	Genital warts		
P 31-1	Characteristics of human papillomavirus 6 and 11 infection in anogenital warts and corresponding hair follicles over the period of two years	Hošnjak L.	Slovenia

P 35 Advocacy, acceptability and psychology

P 35-1	Safety first: elderly women's experiences with HPV testing, cytology and colposcopy, and views on preventive treatment for cervical cancer	Gustafson L. W.	Denmark
P 35-2	Increasing screening uptake: training Japanese nurses to perform cervical screening	Kudo R.	Japan

P 38 Public health

P 38-1	Evolution of the HPV vaccine coverage in France: a French claims data study	Dominiak G.	France
P 38-2	Knowledge and attitudes to hpv vaccine in a group of women who participated on a cervical cancer prevention campaign	Tatti S. A.	Argentina
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