Preliminary PROGRAM 6th Meeting 2022

European Hereditary Tumour Group

Thursday, Sept.29 to Saturday, Oct.1,
in person (+ live streaming) at the Hotel Victoria Gran Melia, Palma de Mallorca,
and virtual event online

THU, Sept.29, 2022

08:00-10:00 a.m. REGISTRATION on siteplace

10:00-11:00 a.m.
The 12 best visual posters (3* + 2' each)
Chairs: Ingrid Winship (Australia), Saskia Haupt(Germany)

1) HLA-specific immunogenicity of Lynch Syndrome associated frameshift peptide neoantigens – towards next-generation cancer vaccines
   Hernandez Sanchez, Alejandro (Germany)
2) APC mosaicism is a relevant explanation in (mild) polyposis phenotypes
   Nielsen, Maartje (Netherlands)
3) Clinical characteristics of pancreatic and biliary tract cancers in Lynch syndrome: a retrospective analysis from the Finnish national Lynch syndrome research registry
   Zalevskaja, Kristina (Finland)
4) Combined somatic copy number alteration and fragmentation analysis for treatment monitoring in colorectal cancer patients using liquid biopsy
   Suárez Sánchez, Aida (Spain)
5) Molecular carcinogenesis pathway of MLH1-associated Lynch syndrome colorectal cancer unraveled: "two-in-one hit" model
   Ahadova, Aysel (Germany)
6) The prevalence of mismatch repair deficiency in ovarian cancer: systematic-review and metanalysis
   Ryan, Neil (UK)
7) Detection of mismatch repair deficiency in colonoscopic biopsies and urine using a simple PCR multiplex with potential for postal urinary tumour surveillance in Lynch syndrome patients
   Jackson, Michael (UK)
8) Genetic testing in early onset colo-rectal cancer: experience of an oncogenetic consultation in the era of NGS sequencinig
   Farelly, Solenne (France)
9) Lynch Syndrome is associated with fecal and salivary dysbiosis
   Mannucci, Alessandro (Italy)
10) Why the combination of modeling and machine learning could be the future direction in mathematical oncology
    Haupt, Saskia (Germany)
11) The Person-Based Approach to optimising a personalised, interactive patient decision aid for people with Lynch syndrome
    Kohut, Kelly (UK)
12) Mesalamine for Colorectal Cancer Prevention Program in Lynch Syndrome (MesaCAPP)
    Backman, Ann-Sofie (Sweden)

11:00-11:30 a.m. COFFEE BREAK

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11:30 a.m.-01:30 p.m.
Plenary Session 1
Chairs: Annika Auranen (Finland), Matt Yurgelun (USA), Michael Scharl (Switzerland)

1. Protecting fertility in patients with hereditary cancer syndromes
   Auranen, Annika (Finland)
2. What do the patients value in risk management – a patient association perspective
   Nicola Reents (Germany)
3. What do the patients value in risk management – a cancer family perspective
   Dubin, Dave (USA)
4. Cancer vaccines
   Vilar, Eduardo (USA)
5. Immune surveillance and immune prevention in Lynch syndrome – new evidence for the feasibility of cancer-preventive vaccines
   Kloor, Matthias (Germany)
6. Clinical description and first estimates of age-associated cancer risk and survival in the context of constitutional mismatch repair system deficiency (CMMRD syndrome) : report from the European database of the European consortium C4CMMRD
   Colas, Chrystelle (France)

01:30-02:30 p.m. LUNCH Symposium / LUNCH BOX

02:30-03:30 p.m.
Big Debate 1
Chairs: Dan Buchanan (Australia), Aysel Ahadova (Germany)

Systematic testing should be implemented for all cancers for acquired (somatic) and germline (inherited) genetic variants
Speakers: Ingrid Winship (Australia), TBD
Discussion

03:30-04:30 p.m.
Big Debate 2
Chair: Zohar Levi (Israel)

The term of oligo polyposis serves no purpose
Speakers: Elisabeth Half (Israel), Maartje Nielsen (Netherlands)
Discussion

04:30-05:00 p.m. COFFEE BREAK

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05:00-06:00 p.m.
Evolving Technologies: applications of AI / machine lerning
Chairs: Ann-Sophie Backman (Sweden), Magnus von Knebel-Doeberitz (Germany)

1. AI-assisted Pathology
   Jakob Niklas Kather (Germany)
2. AI-assisted Endoscopy
   Helmut Messmann (Germany)
3. AI assisted radiology/nuclear medicine
   Martin Hüllner (Switzerland)

06:00-07:00 p.m. WELCOME RECEPTION on the MELIA Victoria hotel terrace

END OF DAY ONE

FRI, Sept.30, 2022

08:00-09:00 a.m.: PLSD Meeting

1. Møller, Pål: Lynch Syndrome: Which cancer comes first?
2. Møller, Pål: The four Lynch syndromes
3. Møller, Pål: An additional carcinogenetic mechanism for colon cancer in Lynch syndrome

OPEN PLSD Business Meeting

09:00-11:00 a.m.
Parallel Working Groups

WG 8: Surgery and Gastroenterology (F2F)
Chairs: Gabriela Moeslein (Germany) / Peter Bauerfeind (Switzerland)
Speaker: Alessandro Manucci, "Duodenal Polyposis in FAP and revision of the Spigelman Classification"

1) Is there a correlation between genotype and duodenal phenotype in Familial Adenomatous Polyposis?
   Dhooge, Marion (Italy)
2) Duodenal disease in 579 individuals with MUTYH-associated polyposis: updated findings from an international prospective observational study
   Truscott, Becky (UK)
3) Small bowel cancer in patients with Familial Adenomatous Polyposis – report of two clinical cases and review of literature
   Colletti, Gaia (Italy)
4) Ileoanal pouch cancers in Ulcerative Colitis and Familial Adenomatous Polyposis: A systematic review and meta-analysis
   Pellino, Gianluca (Italy)
5) Metachronous CRC after surgery in Lynch Syndrome

Seppälä, Toni (Finland)

6) Functional Outcome Differences between Males and Females Who have Undergone Reconstructive Surgery with Ileorectal Anastomoses (IRA) or Ileal Pouch-Anal Anastomoses (IPAA) due to Familial Adenomatosis Polyposis - A Prospective Cohort Study
Mira, Daniel (Sweden)
7) Real-time use of artificial intelligence (CADEYE) in colorectal cancer surveillance of patients with Lynch syndrome – a randomized controlled pilot trial (CADLY)
Hüneburg, Robert (Germany)

WG 1: Carcinogenic mechanism and pathways (virtual)

Chairs: Julian Sampson (UK), Sanne ten Broeke (Netherlands)
Speaker: Richarda de Voer (Netherlands), MBD4: the new kid on the BER-deficiency block

1) Clinicopathological Features of Deficient Mismatch Repair (dMMR) Protein Expression Patterns in Colorectal Cancer in a Spanish Cohort
Suárez Sánchez, Aida (Spain)
2) Constitutional MLH1 methylation, frequency and mode of identification
Dardenne, Antoine (France)
3) Genome-wide methylome of Lynch syndrome and Familial adenomatous polyposis-associated colorectal tumors
Mäki-Nevala, Satu (Finland)
4) Germline MBD4 mutations in cancer predisposition
Valle, Laura (Spain)
5) HLA-specific immunogenicity of Lynch Syndrome associated frameshift peptide neoantigens – towards next-generation cancer vaccines
Hernandez Sanchez, Alejandro (Germany)
6) Molecular carcinogenesis pathway of MLH1-associated Lynch syndrome colorectal cancer unraveled: “two-in-one hit” model
Ahadova, Aysel (Germany)
7) APC mosaicism is a relevant explanation in (mild) polyposis phenotypes
Nielsen, Maartje (Netherlands)

WG 3: Epidemiology of hereditary cancer (virtual)

Chairs: Mark Jenkins (Australia) / Christoph Engel (Germany)
Speaker: Karl Heinimann (Switzerland)**:** Prevalence of pathogenic variants in hereditary cancer by whole exome / genome analysis

1) Cancer mortality by organ, gene and gender in carriers of pathogenic mismatch repair gene variants receiving surveillance for early diagnosis and treatment: A report from the Prospective Lynch Syndrome Database
Dominguez Valentin, Mev (Norway)
2) Central Amalgamation of a nationally complete registry of Lynch Syndrome carriers in England
Huntley, Catherine (UK)
3) Germline Mismatch Repair (MMR) gene analyses from English NHS regional molecular genomics laboratories 1996-2020: development of a national resource of patient-level genomics laboratory records
Turnbull, Clare (UK)

4) Implementation of population-wide effective CRC screening for Lynch syndrome using the MSI-Plus Assay
   Herrero Belmonte, Patricia (UK)
5) The English National Lynch syndrome transformation project: An NHS Genomic Medicine Service Programme
   Monahan, Kevin (UK)
6) Universal Testing of Asturian Population Diagnosed with Lynch Syndrome
   Díaz Vico, Tamara (Spain)

11:00-11:30 a.m. COFFEE BREAK

11:30 a.m.-01:30 p.m.
Parallel Working Groups

WG 9: Systemic biomarkers (F2F)
Chairs: Mev Dominguez-Valentin (Norway) / Aysel Ahadova (Germany)
Speaker: José Perea Garcia, Update of the recent advances in liquid biopsy in colorectal cancer management

1) Combined somatic copy number alteration and fragmentation analysis for treatment monitoring in colorectal cancer patients using liquid biopsy
   Hallermayr, Ariane (Germany)
2) A Demonstration of Microsatellite Instability Analysis with Circulating Tumor DNA in Endometrial Cancer
   Lewis, Samantha (USA)
3) Analysis of plasma cell-free DNA genome-wide methylation in colorectal cancer and adenoma patients - towards a cell-free DNA-based surveillance
   Eikenboom, Ellis (Netherlands)
4) Associations of circulating microRNAs with body mass index, waist circumference, and physical activity in Lynch syndrome
   Sievänen, Tero (Finland)
5) Highly sensitive Liquid Biopsy Duplex Sequencing complements tissue biopsy to enhance detection of clinically relevant genetic variants
   Romic-Pickl, Julia (Germany)
6) Whole-exome sequencing of cell-free DNA reveals mutational signatures associated with Lynch syndrome
   Kauma, Iiro (Finland)

WG 6: Risk and Clinical Management (virtual)
Chairs: Lubinski, Jan (Poland) / Nuria Dueñas Cid (Spain)
Speaker: Tristan Snowsill (UK), Surveillance for gynaecological cancers in Lynch syndrome – lessons from a UK health technology assessment and next steps

1) The Person-Based Approach to optimising a personalised, interactive patient decision aid for people with Lynch syndrome
   Kohut, Kelly (UK)

2) Uncertainty quantification in oncology - How do uncertain data influence model results and clinical decision making?
   Zeilmann, Alexander (Germany)
3) From Diagnosis of Colorectal cancer to Diagnosis of Lynch Syndrome: The RM Partners Quality Improvement Project
   Monje-Garcia, Laura (UK) / Ana Koziel (UK)
4) Improvement of IAFLD under TEDUGLUTIDE in a patient with familiary adenomatous polyposis (FAP) and short bowel syndrome
   Bauerfeind, Peter (Switzerland)
5) Mesalamine for Colorectal Cancer Prevention Program in Lynch Syndrome (MesaCAPP)
   Backman, Ann-Sofie (Sweden)
6) Clinical characteristics of pancreatic and biliary tract cancers in Lynch syndrome: a retrospective analysis from the finnish national Lynch syndrome research registry
   Zalevskaja, Kristina (Finland)

WG 2: Early onset cancers (virtual)
Chairs: José Perea (Spain) / Laura Valle (Spain)
Speaker: Giulia Martina Cavestro, **DIRECT:** Delphi initiative for EoCRC. CGA-IGC, EHTG, AIFET Guidelines for the Management of Early-Onset Colorectal Cancer

1) Genetic testing in early onset col-rectal cancer: experience of an oncogenetic consultation in the era of NGS sequencinig
   Farelly, Solenne (France)
2) Young-onset gastric cancers are often early gastric cancers
   Puzzono, Marta (Italy)
3) Comprehensive characterization of hereditary cancer cases from Peru: Bringing precision medicine to a low-resource setting
   Dominguez Valentin, Mev (Norway)
4) Germline pathogenic variants detected in microsatellite-instable cancers: a two-year prospective experience from a Hungarian center
   Grolmusz, Vince Kornél (Hungary)

01:30-02:30 p.m. LUNCH

02:30-04:30 p.m.
Parallel Working Groups

WG 4: Genetics & Counselling (F2F)
Chairs: Rolf Sijmons (Netherlands) / Heather Hampel (USA)
Speaker: Sigve Nakken (Norway), Interpretation of cancer-predisposing germline variants with Cancer Predisposition Sequencing Reporter (CPSR)

1) A national picture of molecular testing for Lynch syndrome in England highlights gaps in testing and opportunities for improved diagnosis
   McRonald, Fiona (UK)
2) A NURSE LED GENETIC CLINIC FOR LYNCH SYNDROME TESTING IN COLORECTAL CANCER 1 YEAR LATER

Langford, Lora (UK), Mauro Proserpio (UK)

3) APC-specific ACMG/AMP variant classification guideline alleviates the burden of variants of uncertain significance in ClinVar and locus-specific databases
   Aretz, Stefan (Germany)
4) Targeted short-read RNA sequencing as supplement to DNA germline testing to increase diagnostic yield
   Romic-Pickl, Julia (Germany)
5) Existing with a cancer ghost in the back of my mind- Written narratives of living with Lynch syndrome
   Eriksen, Elin O. (Norway)
6) Mutational and transcriptomic landscape and somatic evolution in Li-Fraumeni Syndrome-associated tumourigenesis
   Torra I Benach Maria (UK)
7) Psychological well-being of people living with a colorectal cancer predisposition syndrome: evidence from a systematic review
   Monje-Garcia, Laura (UK)

WG 5: Novel associations (virtual)

Chairs: Christina Therkildsen (Danmark), Pål Møller (Norway)
Speaker: Laura Valle (Spain), Wnt signaling genes as cause of serrated polyposis

1) High Prevalence of MUTYH Associated Polyposis Among Minority Populations in Israel, due to Rare Founder Pathogenic Variants
   Reznick Levi, Gili (Israel)
2) Lynch Syndrome is associated with fecal and salivary dysbiosis
   Mannucci, Alessandro (Italy)
3) Oligodontia-colorectal cancer syndrome with cleft palate as a possible new feature in a cohort of 13 AXIN2 variant carriers
   Roht, Laura (Estonia)
4) Risk of Second Primary Thyroid Cancer in Women with Breast Cancer
   Lubinski, Jan (Poland)
5) Why the combination of modeling and machine learning could be the future direction in mathematical oncology
   Haupt, Saskia (Germany)
6) Clinically relevant combined effect of polygenic background, rare pathogenetic germline variants, and family history on colorectal cancer incidence
   Aretz, Stefan (Germany)

WG 7: Screening in gynecology, urology and beyond (virtual)

Chairs: Neil Ryan (UK) / Denise R. Nebgen (USA)
Speaker: Denise R. Nebgen (USA), Should women with Lynch syndrome be offered gynecological cancer surveillance?

1) Hypercalcemic Ovarian carcinoma and mutation of SMARCA4: we need a prematurely testing
   Perez-Lopez, Maria-Eva (Spain)
2) The prevalence of mismatch repair deficiency in ovarian cancer: systematic-review and metanalysis
   Ryan, Neil (UK)

3) The genomic and clinico-pathological characteristics of sebaceous skin lesions from people with Lynch syndrome
   Buchanan, Dan (Australia)
4) Detection of mismatch repair deficiency in colonoscopic biopsies and urine using a simple PCR multiplex with potential for postal urinary tumour surveillance in Lynch syndrome patients
   Jackson, Michael (UK)
5) Distinguishing the molecular profile of endometrial cancer by spectroscopy: A Diagnostic Cross-Sectional Study
   Ryan, Neil (UK)
6) NON-BRCA MUTATION PREVALENCE IN HEREDITARY BREAST AND OVARIAN CANCER SYNDROME IN OUR CENTRE
   Jimenez Ruiz, Francisco Javier (Spain)

04:30- end of congress day for all non-participants of FAP Guidelines

04:30-06:30 p.m.
FAP Guidelines (by invitation only) F2F and virtual

07:30 p.m. – OPEN END: CONFERENCE DINNER
END OF DAY 2

SAT, Oct.1, 2022

09:00-11:00 a.m.
WG Reporting Back Session and Collaborative Studies
Chairs: Rolf Sijmons (Netherlands), Giulia Martina Cavestro (Italy)

11:00-11:30 a.m. COFFEE BREAK

11:30 a.m.-12:45 p.m.
Hot Topics
Chairs: Stefan Aretz (Germany), Tone Seppälä (Finland)

1) Challenges of organizing European patient cancer registries for research (online)
   Speaker: Hoogerbrugge, Nicoline (Netherlands) (on behalf of ERN GENTURIS)

2) **ESCP/EHTG – Joint symposium; Topic: PD-1 blockade in mismatch repair-deficient cancer**
   Introduction: Triantafillos Doulias (USA)
   Speakers:
   Shiu, Kai-Keen (UK)
   Discussant:
   Burn, John (UK)

12:45-01:30 p.m.
Networking with patients and their organisations
Chair & Organizor: **Nicola Reents**, 1-2 patient rep's **(TBD)**
Question: How would you change the health system? (3'+2')

1. Semi-Colon patient advocacy group (Germany)
2. Mutagens (Italy)
3. AFALynch (Spain)
4. Lynch Syndrome (UK)
5. Lynch syndrome (Ireland)
6. Colores (Finland)
7. Lynch+Polyposis syndromes (Netherlands)

01:30-02:30 p.m. EHTG Business Meeting & LUNCH BOX

02:30-03:15 p.m.
Big Debate 3
Chairs: Gabriel Capella (Spain) / TBD
Aspirin prevents more LS colorectal cancers than endoscopy
Speakers: Burn, John (UK), Thomas Rösch (Germany)
Discussion

03:15-03:45 p.m.
Best of abstracts
Chair: Matthias Kloor (Germany)

1) Assessment of the ability of the polygenic background to refine colorectal cancer risk in Lynch syndrome
Dueñas Cid, Nuria (Spain)
2) Mutation rate evolution drives immune escape in mismatch repair-deficient cancer
Jansen, Marnix (UK)

03:55-04:30 p.m.
Big Debate 4
Chairs: Chairs: Michael Scharl (Switzerland) /Rodney Scott (UK)
Molecular testing can direct management of colorectal cancer
Speakers: Pellino, Gianluca (Italy), Seppälä, Toni (Finland)
Discussion

04:30-05:00 p.m. COFFEE BREAK

04:30 p.m. Farewell
Gabriela Moeslein (Germany)

General remark:

The meeting will be a plenary F2F meeting (with live-streaming) in the conference rooms of the beautiful Hotel Gran Melia Victoria in Palma de Mallorca. On Thursday, Sept. 29, there will be a plenary sessions day, same as on Saturday, October 1. On Friday, we have planned the Working Group day with a total of 9 (3x3) parallel working

groups, of which a total of three successive working groups will be F2F in the conference meeting room. 2 parallel working groups throughout the day (3 x 2) will be a virtual meeting, of course with live interaction.