



BWP

Belgian Week
of Pathology

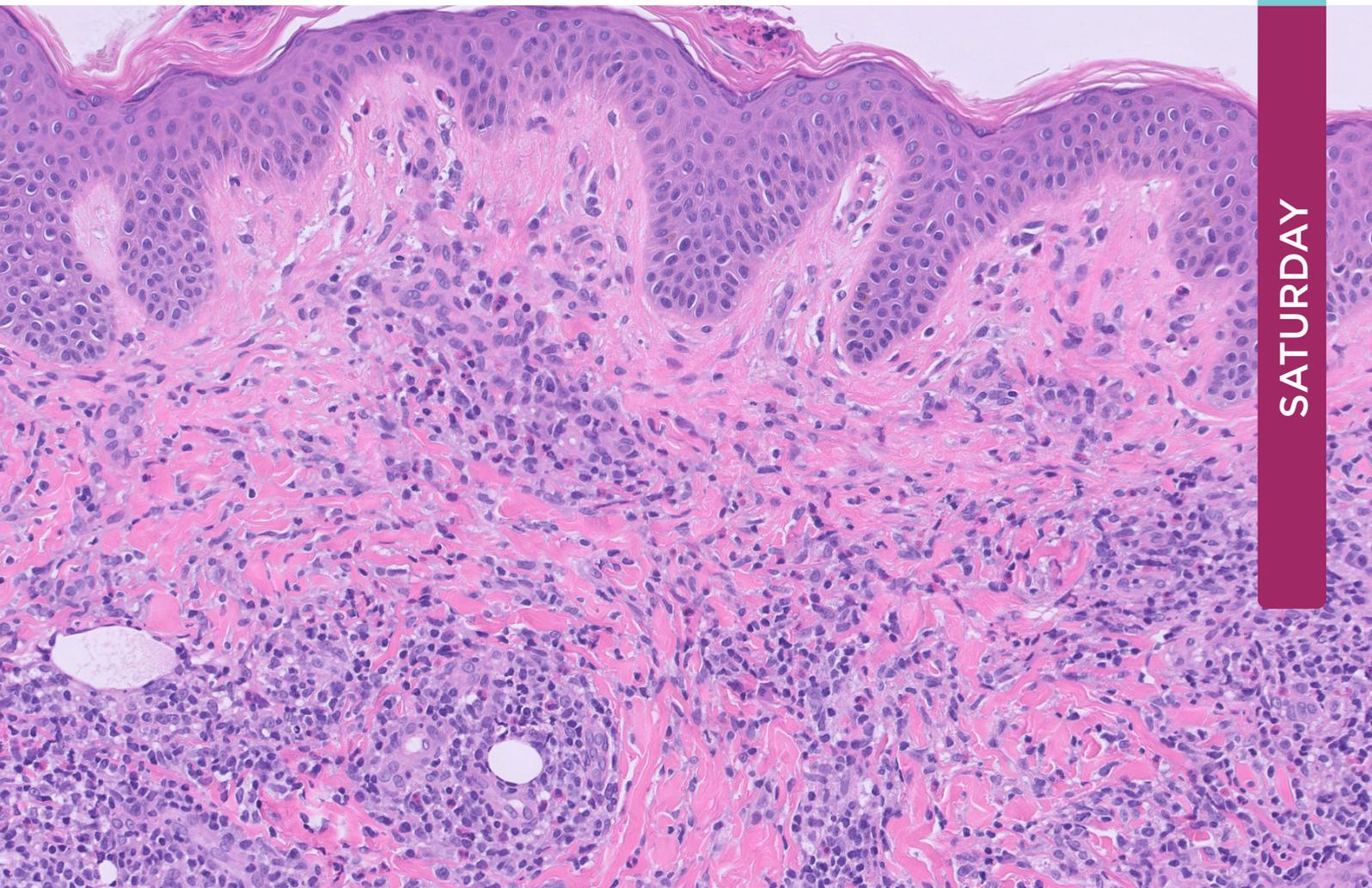
**13th BELGIAN WEEK
OF PATHOLOGY**

20.10 > 21.10.23

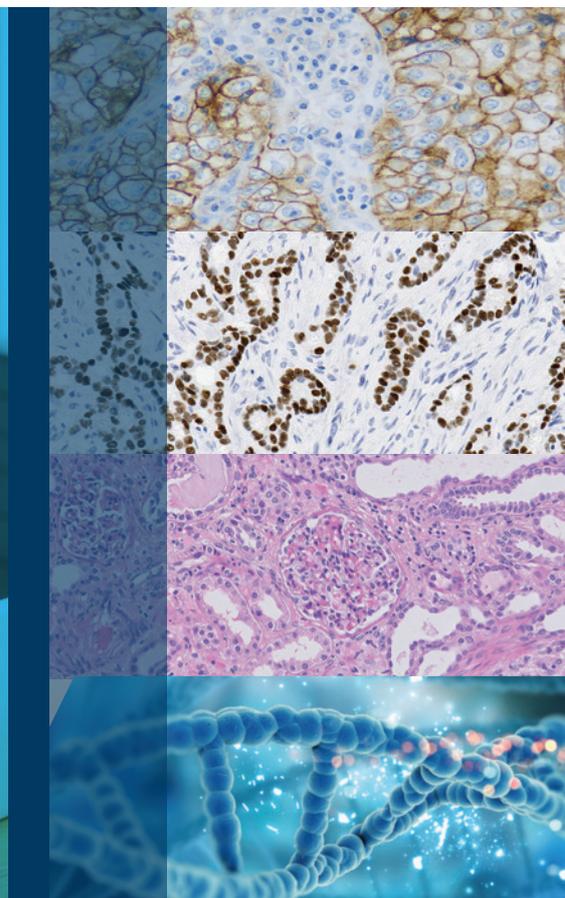
@ TANGLA HOTEL

FRIDAY

SATURDAY



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Agilent Pathology
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Dear Colleagues and Friends,

It is our pleasure to welcome you at the 13th edition of the **Belgian Week of Pathology** (BWP), held at the Tangla Hotel in Brussels.

The previous editions of the BWP have been a great success and have raised the congress to an international educational level. The BWP provides an environment where pathologists can share knowledge, insights and experiences that will enhance their activities for the benefit of patients.

This is achieved through the educational programme with distinguished national and international **speakers**, the professional **organization** of the congress and the support of our industry **partners**.

Our aim this year is to continue this successful course of the BWP.

The Belgian Society of Pathology wants to remain at the forefront in all subspecialties; for this reason, we are working together with the different **Working Groups** of the BSP to put together a comprehensive and educational programme for this year as well.

The Keynote theme of this BWP 2023 will be **Inflammatory Skin Pathology**. The keynote speaker will be Dr Steven Billings from the Cleveland Clinic. Dr **Billings** is an internationally renowned dermatopathologist and author of many books on dermatopathology.

The **Educational Grant Symposium** will have a special theme this year on sustainable development in pathology. The lecture will be given by Anne Rullier for Bordeaux chaired by Dr Ivan Theate.

Prof. Dr. Jason **Hornick** from Brigham & Women's Hospital (Harvard Medical School) in Boston will give a lecture on soft tissue tumours in the young pathologists session, but also in the dermatopathology session. Prof Dr Hornick is an important figure in the world of pathology around the globe.

Our programme will also cover the **new WHO classification of neuroendocrine tumours**. Dr. G. Rindi (Italy) will focus on neuroendocrine tumours of the lung, while Prof. Dr. J-Y. Scoazec (France) will focus on gastrointestinal neuroendocrine tumours and Dr Ch. Villa (France) on pituitary tumours.

The programme is broad and covers many areas of pathology such as **haematopathology, gynaecopathology, gastrointestinal pathology, cytopathology, molecular pathology** and, of course, **digitization**. We will have the opportunity to follow interesting sessions, created in collaboration with the different working groups and to listen to important and well-known national and international speakers in their field.

As in previous years, we encourage residents to present their work by submitting abstracts for poster and **oral free presentation**. Several prizes will be awarded for excellent research, but also for the presentation of interesting and difficult cases.

On Friday evening we will have the **Pathology Congress Dinner** at the Tangla Hotel. This dinner is an equally important event of the conference, as it is an excellent opportunity for colleagues to reunite and meet the guest speakers in person. So don't miss the opportunity to reserve your place!

Mrs Anne-France De Meyer and her team have done an excellent job of organizing the congress over the years and have received nothing but positive feedback from all participants. This year they promise another successful organization.

Last but not least, BWP 2023 would like to thank our industry partners for their renewed and continued support! It is always a pleasure to continue our constructive collaboration.

We look forward to seeing you all there!

Vasiliki SIOZOPOULOU

President of the Belgian Week of Pathology

Koen VAN DE VIJVER

Vice-president of the Belgian Week of Pathology

Pieter DEMETTER

President of the Belgian Society of Pathology



BRISTOL MYERS SQUIBB PIONEER IN IMMUNO-ONCOLOGY



IMMUNO-ONCOLOGY
A GENIUS IDEA THAT IS TRANSFORMING
THE WORLD OF ONCOLOGY



Accreditation

Accreditation has been requested with the INAMI/RIZIV for ethics and economy as well as anatomo-pathology.

Submission is done on the computers available in the exhibition area.

Submission is requested twice a day on Friday and Saturday. For ethics and economy a physical signature will be additionally asked at the beginning of the session.



Language

The language of the congress is English (British spelling) for abstracts, slides and announcements.



Abstracts

Authors were invited to submit abstracts until July 17, 2023.

The result of evaluation was sent to the first authors end of August 2023.

- Oral presentations will be presented during the related sessions
- e-Poster presentations will take place during the morning and afternoon coffee breaks and lunch of Friday October 20 and Saturday October 21.

e-Posters will be displayed during the congress on the assigned screens in the Exhibition Area.

The Belgian Week of Pathology and the Belgian Society of Pathology will award:

- the Best Oral Presentation: Research (500€)
- the Best Oral Presentation: Case report (500€)
- Best e-Poster (500€).



Venue

TANGLA Hotel Brussels
5, Avenue Emmanuel Mounier
1200 Brussels



Parking available

Parking: Several possibilities during the 3 days

- the Parking of the Tangla Hotel is available, the cost per day will be 5€ per day: 120 spaces
- the Q-Parc of Hospital Saint-Luc or the Q-Parc Esplanade
- along Avenue Mounier with time restriction, the Parking disc is mandatory.



Event Coordinator

DME Events - 57, Av. G. Demey - 1160 Brussels - Belgium

Anne-France De Meyer : Mobile: +32 477 27 00 45

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Christelle Martinez : Mobile: +32 499 73 62 96

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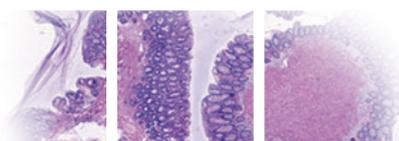
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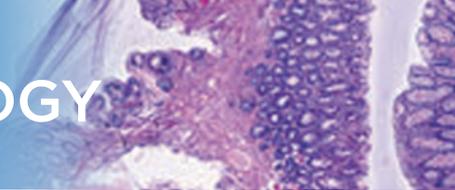


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FRIDAY

SATURDAY





FRIDAY

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www.belgian-society-pathology.eu

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Gynecology

Jean-Christophe NOËL

Molecular

Nicky D'HAENE

Surgical

Philippe DELVENNE

Urology

Sofie VERBEKE

SATURDAY



BWP Committee

President: SIOZOPOULOU Vasiliki

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Foreign Faculty

BAZYLEVA Ekatarina	Varna, Bulgaria	RINDI Guido	Rome, Italy
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DE JAGER Vincent	Groningen, The Netherlands	SCOAZEC Jean-Yves	Paris, France
GOODLAD John	Glasgow, U.K.	SHEAHAN Kieran	Dublin, Ireland
HORNICK Jason	Boston, USA	VILLA Chiara	Paris, France
PLANTIER Françoise	Paris, France		

Belgian Faculty

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BOGERS Johnn-Paul	AML Antwerpen	LELIE Bart	AZ Zeno, Knokke-Heist
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FEREIRA Ingrid	ULB Erasme, Bruxelles	WEYNAND Birgit	UZ Leuven

FRIDAY

SATURDAY



PROGRAM OVERVIEW

FRIDAY

■ ROYAL 2 & 3

■ ROYAL 1

FRIDAY 20/10

- 08.00-09.00 WELCOME
- 09.00-10.30 ■ **Surgical Pathology**
■ **Haematopathology**
- 10.30-11.15 COFFEE BREAK + e-POSTER TOUR
- 10.40-11.10 SATELLITE SYMPOSIUM:
ASTRAZENECA
- 11.15-12.45 ■ **Surgical Pathology**
■ **Digitization**
- 12.45-14.00 LUNCH + e-POSTER TOUR
- 13.20-13.50 SATELLITE SYMPOSIUM:
OWKIN
- 14.00-15.00 ■ **EDUCATIONAL GRANT SYMPOSIUM:**
Towards green Path labs in Belgium?
- 15.00-15.45 BREAK + e-POSTER TOUR
- 15.10-15.40 SATELLITE SYMPOSIUM:
ASTRAZENECA
- 15.45-17.45 ■ **Molecular Pathology**
■ **Gynaecopathology**
- 18.00-19.00 ■ **KEYNOTE lecture: Inflammatory**
Dermatopathology
- 19.00-23.00 COCKTAIL RECEPTION AND DINNER
AT THE TANGLA HOTEL



PROGRAM OVERVIEW

 ROYAL 2 & 3

 ROYAL 1

SATURDAY 21/10

- 08.00-09.00 WELCOME
- 09.00-10.30  **Cytopathology**
 Young Pathologist Section
- 10.30-11.15 COFFEE BREAK + e-POSTER TOUR
- 10.40-11.10 SATELLITE SYMPOSIUM:
SIEMENS HEALTHINEERS / PROSCIA
- 11.15-12.45  **Cytopathology**
 Gastrointestinal Pathology
- 12.45-14.00 LUNCH + e-POSTER TOUR
- 13.00-13.20  **GENERAL ASSEMBLY BELGIAN
SOCIETY OF PATHOLOGY**
- 13.20-13.50 SATELLITE SYMPOSIUM:
BMS
- 14.00-16.00  **Dermatopathology**
- 16.00-16.15 AWARDS CEREMONY +
CLOSING OF BWP 2023

SATURDAY





Please join us for the satellite symposium
Friday October 20th, 10:40 - 11:10,
Royal 2&3

HER2: A ONE YEAR ARTIFICIAL INTELLIGENCE EXPERIENCE

Dr. Frederik Deman
**Laboratorium voor pathologische
anatomie PA2 GZA/ZNA, Antwerp**

08.00-09.00 WELCOME

ROYAL 2&3

09.00-10.30 **SURGICAL PATHOLOGY:
NEUROENDOCRINE TUMORS**

*Moderators: Philippe Delvenne (Liège),
Anne Hoorens (Gent)*

09.00 • Invited Lecture: Introduction to the new WHO classification 2022 on neuroendocrine tumors, and its application on lung neuroendocrine tumors.

Guido RINDI (Rome, Italy)

09.45 • Invited Lecture: Neuroendocrine neoplasms of the pancreas: update on histopathology, genomics and reporting.

Anne HOORENS (Gent)

ROYAL 1

**HAEMATOPATHOLOGY: CUTANEOUS
LYMPHOPROLIFERATIONS**

*Moderators: Pascale De Paepe (Brugge),
Esther Hauben (Leuven)*

09.00 • Invited Lecture: Cutaneous lymphoproliferations.

John GOODLAD (Glasgow, UK)

09.45 • Workshop given by the members of the working group and trainees.

10.15 • Oral Free Presentation:
A Case of Polymorphic Lymphoproliferative Disorder Arising in Immune Iatrogenic Dysregulation, Lymphomatoid Granulomatosis-type.

Loïc DUCHÊNE (Liège)

FRIDAY

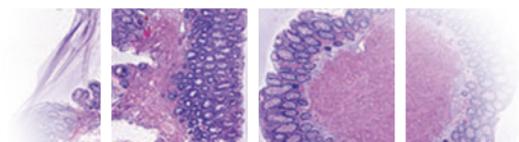
10.30-11.15 COFFEE BREAK & POSTERS TOUR

ROYAL 2&3

10.40-11.10 **SATELLITE SYMPOSIUM ASTRAZENECA**

HER2: A one year artificial intelligence experience.

Frederik DEMAN (Antwerp)



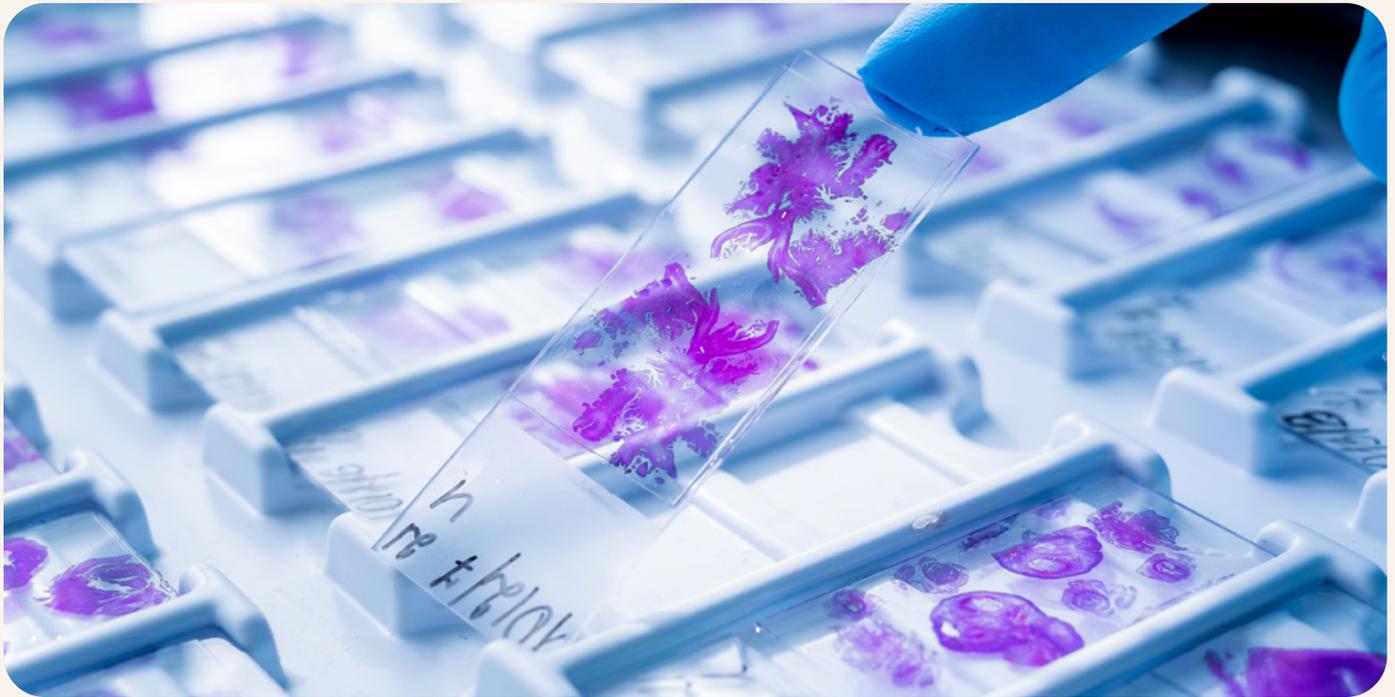


OWKIN



BWP

Belgian Week
of Pathology



OWKIN satellite symposium

Role of AI in optimizing MSI screening in colorectal cancer from H&E slides

With MSI expert:

Professor Frédéric Bibeau

Head of pathology department, CHU Besançon, France

Conference room Royal 2&3

Friday, October 20th 2023 | 13:20-13:50

Learn more at owkin.com/diagnostics/msintuitcrc

11.15-12.45

ROYAL 2&3

SURGICAL PATHOLOGY: NEUROENDOCRINE TUMORS

*Moderators: Philippe Delvenne (Liège),
Anne Hoorens (Gent)*

- 11.15 • **Invited Lecture:** Neuroendocrine neoplasms of the gastro-intestinal tract: basics, novelties and perspectives.
Jean-Yves SCOAZEC (Paris, France)
- 12.00 • **Invited Lecture:** The World Health Organization classification of pituitary neuroendocrine tumours: A clinico-pathological appraisal.
Chiara VILLA (Paris, France)
- 12.30 • **Oral Free Presentation:** Implementation of the 5th edition of the WHO Classification of Tumors of the CNS and its implications.
Melek AHMED (Antwerpen)

ROYAL 1

DIGITIZATION

*Moderators: Amélie Dendooven (Gent),
Paul Seegers (Houten, The Netherlands)*

- 11.15 • **Invited Lecture:** What is what? Explaining terminology and data 'for dummies'.
Amélie DENDOOVEN (Gent)
- 11.40 • **Invited Lecture:** Why do we need to pay attention to reporting and data? Examples of using structured data in oncology and molecular pathology
Vincent DE JAGER (Groningen, The Netherlands)
- 12.05 • **Invited Lecture:** Status of project on structured reporting BELSYROPA.
Ekaterina BAZYLEVA (Varna, Bulgaria)
- 12.30 • **Oral Free Presentation:** High-grade neuroepithelial tumor with MN1:CXXC5 fusion": a novel central nervous system entity.
Marie-Lucie RACU (Brussels)

12.30-14.00

LUNCH & POSTER TOUR

ROYAL 2&3

13.20-13.50

SATELLITE SYMPOSIUM OWKIN

Role of AI in optimizing MSI screening in colorectal cancer from H&E slides.

Frederic BIBEAU (Besançon, France)





Please join us for the satellite symposium Friday
October 20th, 15:10 - 15h40 room ROYAL 1

LEARNINGS OF BRCA TESTING IN PROSTATE CANCER

Dr Maria-Dolores Martin-Martinez
Institut de Pathologie et Genetique (IPG), Gosselies



ROYAL 2&3

14.00-15.00

EDUCATIONAL GRANT SYMPOSIUM

Moderator: Ivan Théate (Namur)

14.05 • Invited Lecture: Energy and Climate changes. Challenges and impacts for the health(care) : what is the true emergency of the 21th century ?

Julie ANGLADE (Brussels)

14.23 • Invited Lecture: Is ecologic transformation possible in the hospital? The importance of general strategy : the example of CHU UCL Namur.

Pauline MODRIE (Namur)

14.35 • Invited Lecture: A labellized sustainable clinical unit (Path Lab) : the experience of the CHU Bordeaux.

Anne RULLIER (Bordeaux, France)

14.53 • Q/A, conclusions and proposal of a national working group.

Ivan THEATE (Namur)

FRIDAY

15.00-15.45

COFEE BREAK & POSTERS TOUR

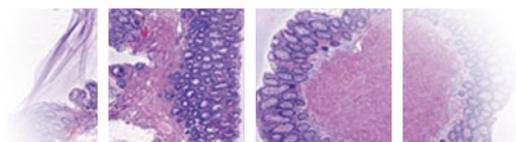
ROYAL 1

15.10-15.40

SATELLITE SYMPOSIUM ASTRAZENECA

Learnings of BRCA testing in prostate cancer.

Maria-Dolores MARTIN-MARTINEZ (Gosselies)



Key-Note Lecture

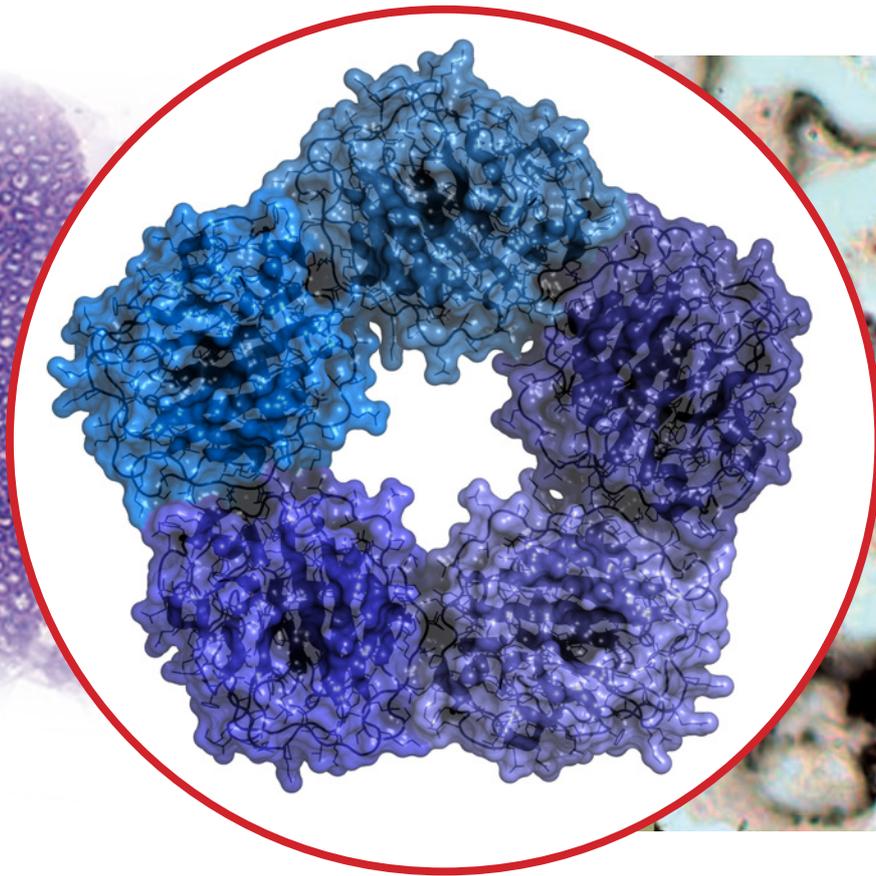
FRIDAY

14.00-15.00

Inflammatory Dermatopathology for the General Pathologist



PROF STEVEN BILLINGS (Cleveland, Ohio, USA)



Organised thanks to the Educational Grant
with the kind support The Belgian Society of Pathology



- 15.45-17.45
- ROYAL 2&3**
MOLECULAR PATHOLOGY
- Moderators: Nicky D'Haene (Brussels),
Dieter Peeters (Antwerp/
Mechelen)*
- 15.45 • **Invited Lecture:** Clinical studies with comprehensive genomic profiling in Belgium: results of the BALLETT and GENE0 initiatives.
Brigitte MAES (Hasselt)
- 16.30 • **Workshop** given by the members of the working group and trainees. When molecular pathology helped to solve my case (or not) - Instructive Cases.
*Birgit WEYNAND (Leuven),
Christine GALANT (Brussels),
Maria-Dolores MARTIN-MARTINEZ (Gosselies),
Patrick PAUWELS (Brussels),
Laetitia LEBRUN (Brussels)*
- 17.30 • **Selected Abstract to be presented as a lecture:** Molecular landscape of sebaceous tumours.
*Ingrid FERREIRA
(Hinxtton, United Kingdom)*

- ROYAL 1**
**GYNAECOPATHOLOGY:
INFLAMMATORY VULVAR DISEASES**
- Moderator: Jean-Christophe Noël (Brussels)*
- 15.45 • **Invited Lecture:** Inflammatory lesions of the vulva.
Karoline VAN DEN BOSSCHE (Gent)
- 16.10 • **Invited Lecture:** Squamous precursor lesions.
Koen VAN DE VIJVER (Gent)
- 16.35 • **Invited Lecture:** Melanocytic lesions of the vulva.
Françoise PLANTIER (Paris, France)
- 17.00 • **Workshop** given by the members of the working group and trainees.
- 17.15 • **Oral Free Presentation:** Fibroepithelial stromal polyp of the vulvovaginal region as part of the RB1 family of tumors: friend or foe?
Fleur CORDIER (Gent)

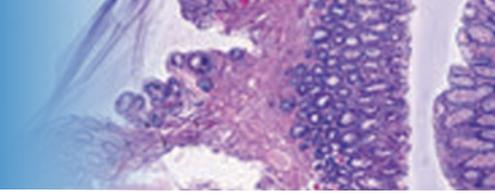
ROYAL 2&3

- 18.00-19.00
- KEYNOTE LECTURE: Inflammatory Dermatopathology**
- Moderator: Marc Haspeslagh (Gent)*
- Inflammatory dermatopathology for the general pathologist.**
- Invited Speaker: Steven BILLINGS (Cleveland, USA)*

TANGLA HOTEL

- 19.00-23.00
- Cocktail Reception and Dinner at Tangla Hotel**





FRIDAY

SATURDAY

Lined area for taking notes, consisting of horizontal dotted lines.



FRIDAY October 20 -
19.00-23.00

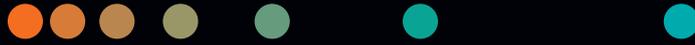
COCKTAIL RECEPTION AND
DINNER AT TANGLA HOTEL

FRIDAY



TANGLA
BRUSSELS





Belgian Week of Pathology 2023

Satellite symposium By Siemens Healthineers and Proscia

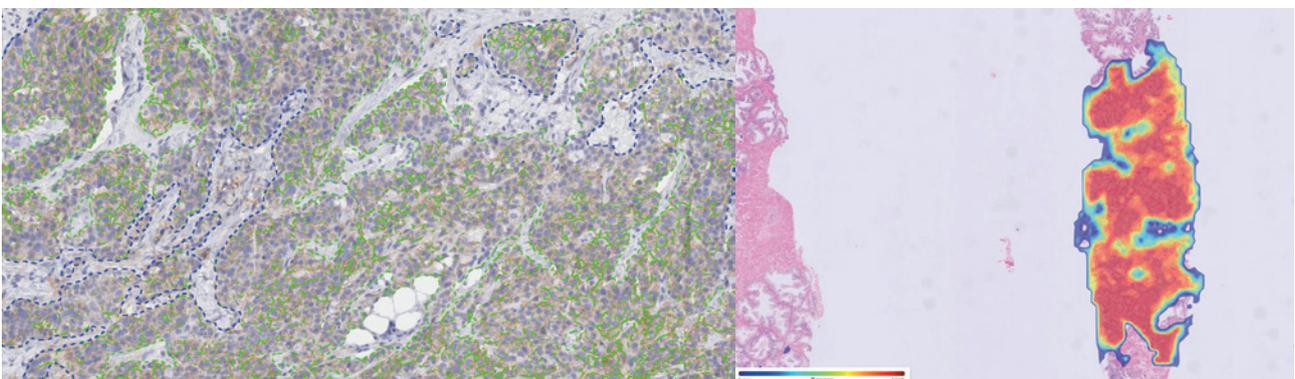


Food for thought: the seamless integration of multiple AI algorithms within everyday workflows.

By Dr. Thomas Sollie, currently Medical Director at Proscia and previously Senior Clinical AI Advisor for Pathology at Unilabs

**Saturday 21 October
10:40 – 11:10**

Dr. Thomas Solie will use his experience in implementing Digital Pathology to share his vision and recommendation for a harmonious symphony of AI algorithms, seamlessly collaborating within a streamlined workflow liberating pathologists, allowing them to concentrate on crucial tasks and provide enhanced patient care.



Come and visit us also at our booth, where you'll get to see a demo or our solutions.

In partnership
with



08.00-09.00 WELCOME

ROYAL 2&3

09.00-10.30 CYTOPATHOLOGY

Moderators: *Shaira Sahebali (Brussels),
Birgit Weynand (Leuven)*

09.00 • **Invited Lecture:** Cervical screening, past, present and future.

John-Paul BOGERS (Antwerp)

09.45 • **Invited Lecture:** The Genius system; AI in cervical screening.

*Birgit WEYNAND (Leuven),
Kristof COKELAERE (Yperman),
Bart LELIE (Knokke-Heist)*

ROYAL 1

YOUNG PATHOLOGIST SECTION

Moderator: *Irthe Van Assche (Leuven)*

09.00 • **Invited Lecture:** Differential diagnosis of soft tissue tumors: what a young pathologist should know.

Jason HORNICK (Boston, USA)

09.45 • **Workshop** given by the members of the working group and trainees.

*Cyril VAN ESSCHE (Brussels),
Fleur CORDIER (Gent),
Lukas MARCELIS (Leuven)*

10.30-11.15 COFFEE BREAK & POSTERS TOUR

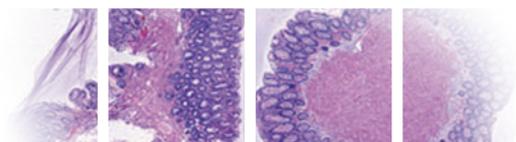
ROYAL 2&3

10.40-11.10 SATELLITE SYMPOSIUM SIEMENS HEALTHINEERS/PROSCIA

Food for thought: the seamless integration of multiple AI algorithms within everyday workflows.

Thomas SOLLIE (PROSCIA)

SATURDAY



BMS

Satellite Symposium

Saturday,
October 21st, 2023

13:20 – 13:50
Tangla Hotel
Woluwe St Lambert
Room: Royal 1



*“Pink is much more
than the colour of an apple”*

Traps of PD-L1 scoring in advanced melanoma

by Dr Vasiliki Siozopoulou

Please meet us at the
BMS booth during BWP
and register to our
Satellite Symposium by
scanning the QR code



ONC-BE-2300112 8/2023

11.15-12.45

ROYAL 2&3 CYTOPATHOLOGY

*Moderators: Shaira Sahebali (Brussels),
Birgit Weynand (Leuven)*

- 11.15 • **HPV primary screening in Europe**
Claire BOURGAIN (Bonheiden)
- 11.35 • **Workshop: Case studies:**
*Marjolein BILLEN (Brussels),
Ellen DEOLET (Gent),
Tristan VEEKMANS (Leuven),
Lia VAN ZUYLEN (Nijmegen,
The Netherlands)*
- 12.30 • **Oral Free Presentation:**
Combined human papillomavirus -
CINtec PLUS testing in a Belgian
cervical cancer screening cohort.
Louise CRAS (Brussels)

ROYAL 1 GASTROINTESTINAL PATHOLOGY

*Moderators: Ann Driessen (Antwerp),
Laurine Verset (Brussels)*

- 11.15 • **Invited Lecture:** Skin-related
inflammatory pathology of the
oesophagus.
Francesca BOSISIO (Leuven)
- 11.50 • **Invited Lecture:** Inflammatory and
(pre)neoplastic pathology of the
anus.
Kieran SHEAHAN (Dublin, Ireland)
- 12.30 • **Oral Free Presentation:**
Travellers from the intestine to the
skin: a useful clue to diagnose a
Cryptic infection.
Emanuele FRIGO (Milan, Italy / Leuven)

12.30-14.00

LUNCH & POSTER TOUR

ROYAL 1

13.00-13.20

GENERAL ASSEMBLY BELGIAN SOCIETY OF PATHOLOGY

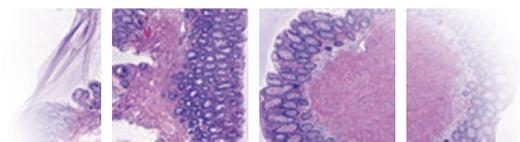
ROYAL 2&3

13.20-13.50

SATELLITE SYMPOSIUM **BMS**

**Pink is much more than the colour of an apple.
Traps of PD-L1 scoring in advanced melanoma.**

Vasiliki SIOZOPOULOU (Brussels)



THE SUPPORT OF OUR PARTNERS MAKES BWP 2023 POSSIBLE.
THANK YOU!

SILVER



BRONZE

ACCURAMED - AIFORIA TECHNOLOGIES - AXLAB - BD - BEMEDTECH
BIOCARTIS - CANCER REGISTRY - CLINISYS - DEDALUS - DIAGOMICS
EIZO - EPREDIA - EVIDENT EUROPE - EXACT SCIENCES - FORLAB
FUJIREBIO - GSK - HAMAMATSU - IBEX - IMTEC DIAGNOSTICS - INCYTE
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ONCO-DNA - PATHOMATION - PROPATH - PROSCIA - SAKURA - SECTRA
SIEMENS HEALTHCARE - TELEMIS



14.00-16.00

ROYAL 2&3 DERMATOPATHOLOGY

*Moderators: David Creytens (Gent),
Vasiliki Siozopoulou (Brussels)*

14.00 • Invited Lecture: Diagnostic challenges in cutaneous vascular tumors.

Steven BILLINGS (Cleveland, USA)

15.00 • Invited Lecture:

Beyond dermatofibroma: what's new in cutaneous soft cutaneous tumors.

Jason HORNICK (Boston, USA)

ROYAL 2&3

16.00-16.15

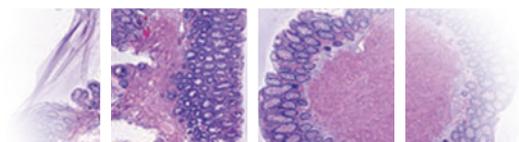
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SATURDAY

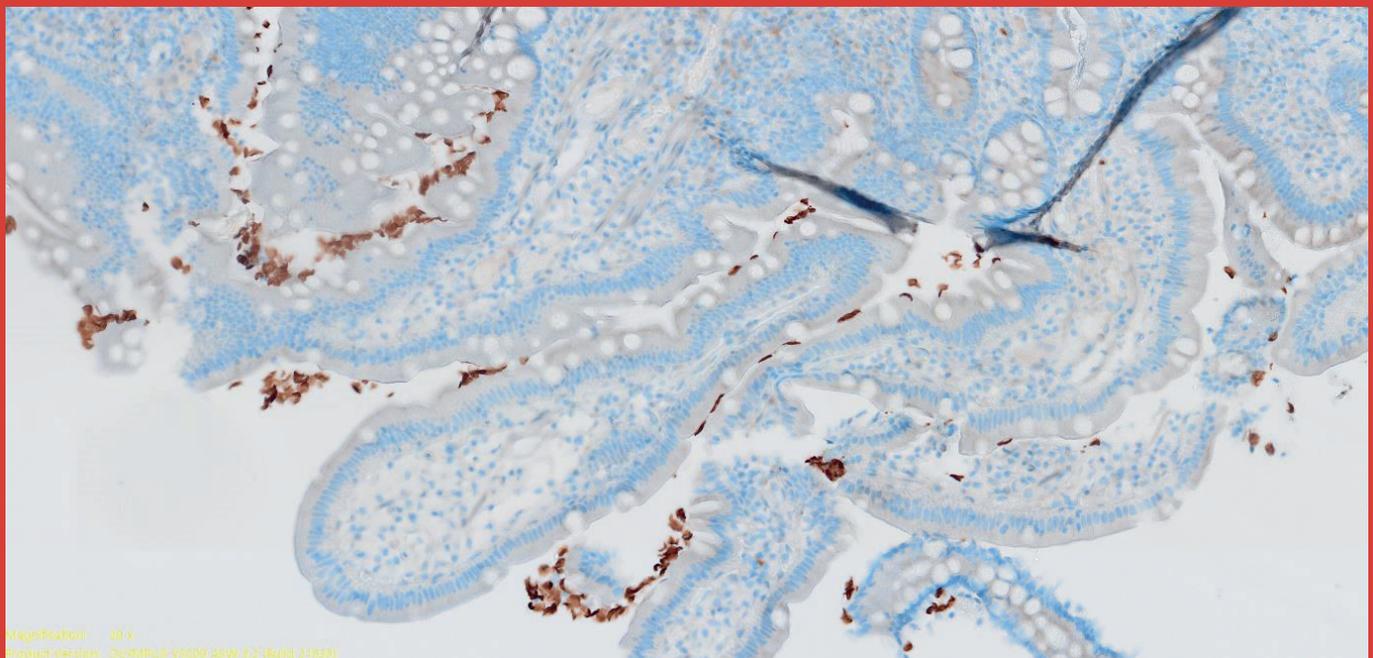
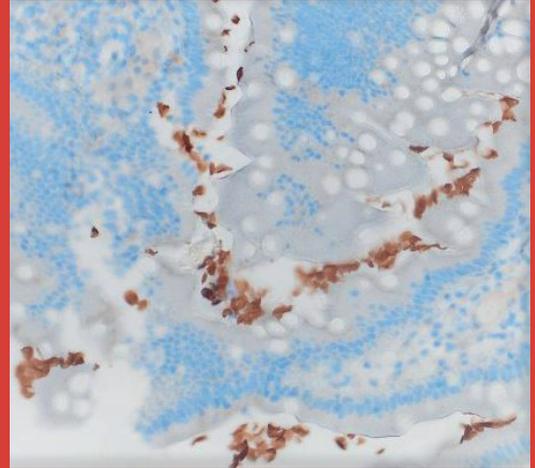


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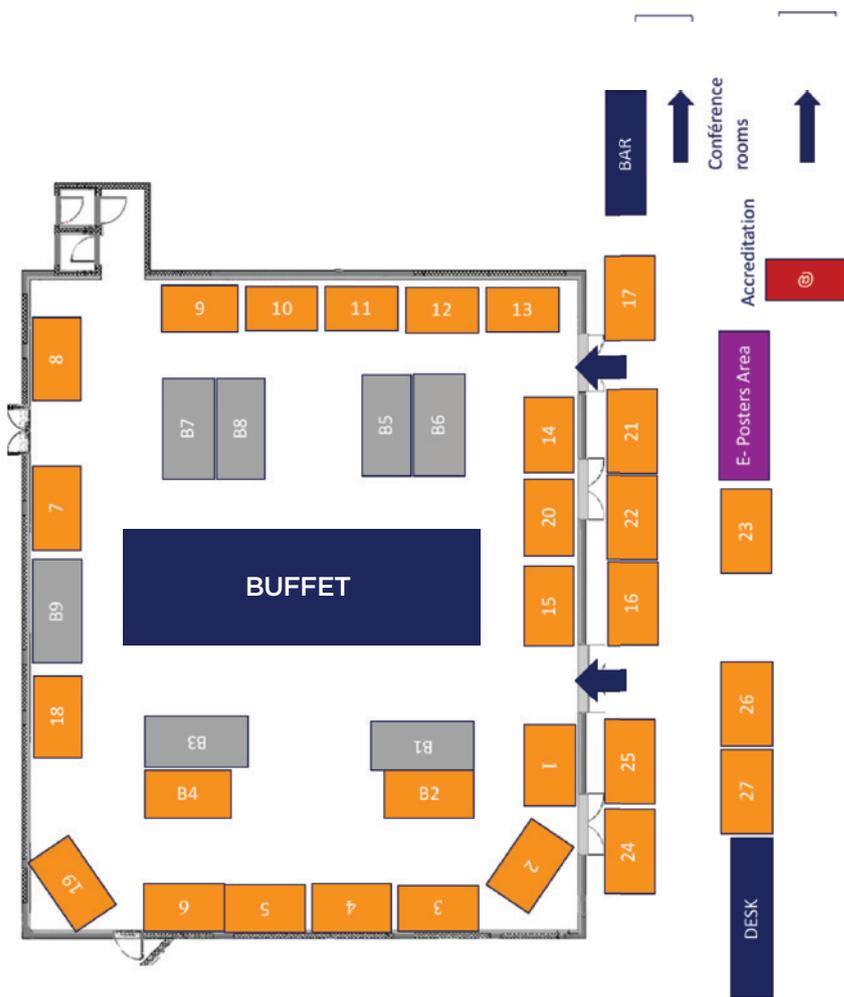


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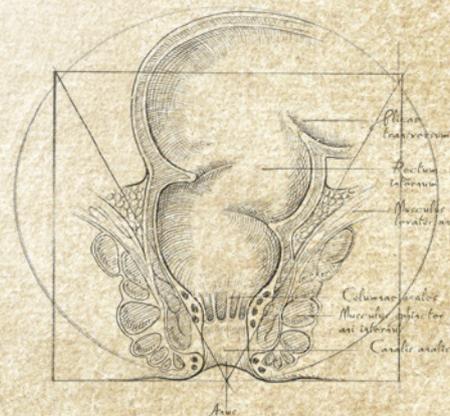
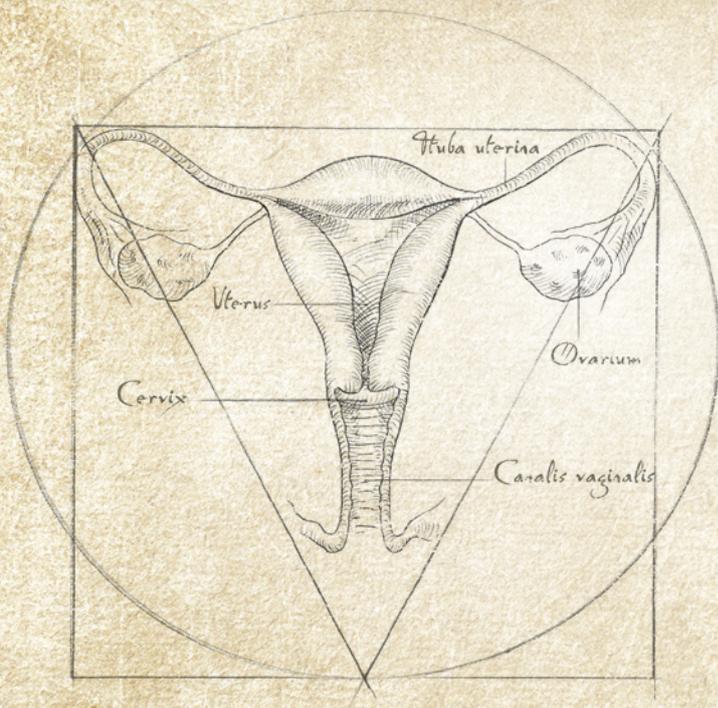
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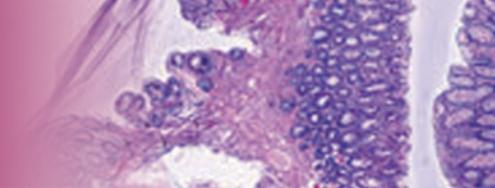




ORAL FREE PAPERS



ORAL FREE PAPERS



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O 01

A CASE OF POLYMORPHIC LYMPHOPROLIFERATIVE DISORDER ARISING IN IMMUNE IATROGENIC DYSREGULATION, LYMPHOMATOID GRANULOMATOSIS-TYPE*Duchêne Loïc, Collins Patrick, Somja Joan**Centre Hospitalier Universitaire de Liège, Belgium***Background**

According to the WHO 5th edition of haemolymphoid tumors, “B-cell Polymorphic Lymphoproliferative Disorders (PLDs) arise in patients with immune deficiency or dysregulation and are composed of a heterogeneous lymphoid cell infiltrate with variable numbers of B-cells exhibiting a full spectrum of B-cell differentiation that efface the architecture of involved tissues”. The PLD lymphomatoid granulomatosis-type (LYG) observes the same histologic characteristics as “true” LYG but differs by a specific etiology of innate or acquired immunodeficiency.

Case Report

A 69-year-old woman presented with neurological and pulmonary symptoms in a context of cryptogenic organized pneumonia treated by azathioprine and methylprednisolone. Biopsy of a cutaneous lesion of the vertex showed a dermal and hypodermal extensive necrosis associated with an angiocentric and angiodestructive heterogenous lymphoid infiltrate composed of small lymphocytes and large atypical lymphoid cells. These large cells were positive for Epstein Barr virus (EBV) by in situ hybridization. A lung biopsy was then performed, with a similar histologic pattern and scattered EBV positive large B-cells as well.

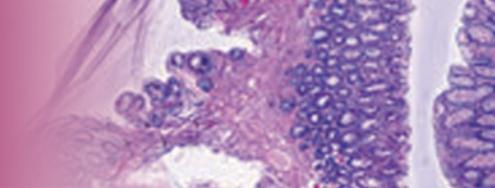
Discussion

The clinical presentation of LYG (and its PLD counterpart) can vary greatly, depending on the localization of the disease. It usually involves the lungs but can occur in any organ, most frequently the central nervous system, skin, kidneys and the liver. Cutaneous lesions can appear at any stage of the disease. This entity is rare and thus can be misdiagnosed. Furthermore, the differential diagnosis with other EBV-positive B lymphoid neoplasia can be tricky. The search for EBV infection in this context of immune dysregulation, combined with the localization of the lesions were essential factors for an accurate diagnosis in our case.

Conclusion

LYG is a rare and not very well-known entity, which can mimic many pathologies clinically and require good anatomic-clinical correlation.





O 02

IMPLEMENTATION OF THE 5TH EDITION OF THE WHO CLASSIFICATION OF TUMORS OF THE CNS AND ITS IMPLICATIONS

Melek Ahmed, Anne Sieben, Barbara Verbraeken, Tomas Menovsky, Marika Rasschaert, Paul Meijnders, Patrick Cras, Léon C. van Kempen, Martin Lammens

Antwerp University Hospital

Background

The implementation of the 2021 WHO CNS tumor classification has introduced molecular analyses as an ancillary diagnostic test.

Objective

The objective of this study was to investigate how the new edition of the WHO CNS tumors changed the clinicopathological assessment of IDH1/2-wild type diffuse glioma.

Patients & Methods

All cases with a diagnosis of IDH1/2-wild type diffuse glioma were included (n=148). The time span for inclusion was limited to the period between November 2021 until March 2023. Molecular testing on DNA and RNA levels was a requirement for inclusion.

Results

A TERT promotor mutation was observed in 117/148 cases (79%), a rate comparable with the literature. An isolated pTERT mutation was observed in 12/148 (8%) of the cases. Morphological diffuse glioma grade 2 or 3 was upgraded to glioblastoma based on molecular alterations alone in 17/148 cases (i.e. molecular GBM, 11%). 16 of these 17 cases showed a TERT promotor mutation, 7 cases showed an EGFR amplification.

At the RNA level, different gene fusion transcripts were detected: EGFR, FGFR3, PTRRZ, MET and ROS1.

Only one case of IDH1/2-wild type low-grade diffuse glioma did not contain a molecular alterations. The methylation profile was compatible with glioblastoma, IDH-wild type.

Conclusions

Implementation of molecular diagnostics for CNS tumors according the current WHO guidelines resulted in the upgrading of IDH-wild type diffuse glioma (grade 2 or 3) to an IDH-wild glioblastoma (grade 4) in 11% of cases based on the molecular results only. This has a considerable impact on the treatment trajectory for these patients. 94% of the upgrading was due to a TERT promotor mutation. An isolated TERT promotor mutation was seen in 8% of all cases, which may have prognostic consequences according to the literature. Furthermore, molecular results pointed towards options for targeted therapy.



O 03

**“HIGH-GRADE NEUROEPITHELIAL TUMOR WITH *MN1:CXXC5* FUSION”:
A NOVEL CENTRAL NERVOUS SYSTEM ENTITY**Marie-Lucie Racu¹, Isabelle Salmon^{1,2}, Laetitia Lebrun¹¹- Department of Pathology, Hôpital Universitaire de Bruxelles (H.U.B), Université Libre de Bruxelles (ULB), Brussels, Belgium.²- Digital Image Analysis in Pathology (DIAPath), Center for Microscopy and Molecular Imaging (CMMI), Université Libre de Bruxelles (ULB), Gosselies, Belgium.**Introduction**

The integration of molecular biology into the diagnosis and prognosis of central nervous system (CNS) tumors has brought about significant changes to the 2021 CNS World Health Organization (WHO) classification. In this report, we present the case of a patient with a rare novel entity classified within the methylation class as «High-grade neuroepithelial (HGNET) tumor with *MN1:CXXC5* fusion».

Case presentation

In 1996, a 10-year-old female was referred to our institution for surgical resection of a large mass located in the left frontal lobe. Microscopic evaluation showed a tumor predominantly organized in multiple circumscribed nodules, but also presenting loose clusters of cells infiltrating the neighboring brain parenchyma. The tumor was highly cellular and composed of small, basophilic cells with scant cytoplasm, dense chromatin, and pseudorosette architecture. Initially, the diagnosis of ependymoblastoma was proposed. The patient received adjuvant radio-chemotherapy and experienced a relapse 18 years later. A second surgical resection revealed the detection of a *MN1* gene fusion by fluorescence in situ hybridization. Using the Heidelberg DNA methylation classifier, this case was classified as «HGNET tumor with *MN1:CXXC5* fusion». The patient passed away due to tumor progression two years after the relapse.

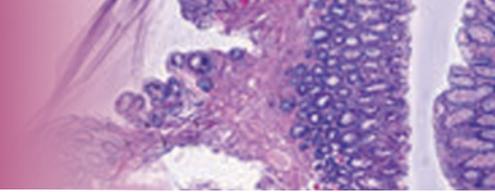
Discussion

The term «HGNET-*MN1*-altered» encompasses a group of morphologically heterogeneous high-grade tumors that pose challenges for diagnosis using conventional methods. While the majority of tumors belonging to this entity are diagnosed as astroblastomas, many cases do not fit this classification, and specific interchromosomal gene fusions may partially explain these differences. Among the known *MN1* alterations, *MN1:CXXC5* gene fusions are exceedingly rare.

Conclusion

In conclusion, our patient presented with a rare novel CNS tumor classified as «HGNET with *MN1:CXXC5* fusion». This case highlights the significance of molecular biology in the diagnosis of CNS tumors and emphasizes the importance of reporting such findings to contribute insights into these rare entities.





O 04

FIBROEPITHELIAL STROMAL POLYP OF THE VULVOVAGINAL REGION AS PART OF THE RB1 FAMILY OF TUMORS: FRIEND OR FOE?

Fleur Cordier¹, Nadine Van Roy^{2,3,4}, Bart Matthys^{1,2}, Pascale De Paepe⁵, Koen Van de Vijver^{1,2}, Jo Van Dorpe^{1,2}, David Creytens^{1,2}

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3- Centre for Medical Genetics, Ghent University Hospital, Ghent University, Ghent, Belgium

4- Department of Biomolecular Medicine, Ghent University, Ghent, Belgium

5- Department of Pathology, AZ Sint-Jan Bruges, Bruges, Belgium

Abstract

Aims

Fibroepithelial stromal polyps (FSPs) are benign mesenchymal lesions occurring in the vulvovaginal region. Following the identification of loss of Retinoblastoma 1 (RB1) on immunohistochemical staining in routine practice, we stained a series of FSPs and performed additional fluorescence in situ hybridization (FISH) and copy number variation (CNV) sequencing to detect losses/deletions in the Retinoblastoma transcriptional corepressor 1 (RB1) gene.

Methods

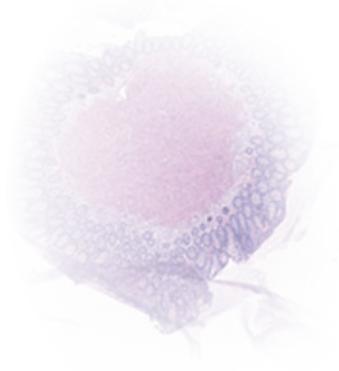
15 FSP cases were stained for RB1 and subsequently 9 cases were examined by FISH to detect a loss of RB1 (13q). Next, CNV sequencing was performed to assess genomic alterations.

Results

Mean age of the patients was 50 years. Loss of RB1 expression on immunohistochemistry was seen in 13 cases and heterogeneous RB1 staining in the remaining 2 cases. FISH showed deletion of RB1 in all of the cases. CNV sequencing failed in almost all cases due to a low tumor content.

Conclusions

Based on our findings, we hypothesize that FSPs are part of a spectrum of genetically related lesions, namely the 13q/RB1 family of tumors (which includes pleomorphic fibromas and spindle cell/pleomorphic lipomas). Due to the clinical, morphological and molecular overlap we suggest that FSPs are pleomorphic fibromas occurring in the specialized stroma of the genital region.



O 05

COMBINED HUMAN PAPILLOMAVIRUS - CİNTEC PLUS TESTING IN A BELGIAN CERVICAL CANCER SCREENING COHORT

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2- Biostatistics and Medical Informatics Research Group (BISI), Vrije Universiteit Brussel (VUB), 1090 Brussels, Belgium

3- Department of Pathology, Ziekenhuis Netwerk Antwerpen (ZNA), 2020 Antwerp, Belgium

4- Department of Pathology, Universitair Ziekenhuis Antwerpen (UZA), 2650 Antwerp, Belgium

Background

Cytological screening with human papillomavirus (HPV) triage for equivocal results has been the routine screening procedure for cervical cancer for years worldwide. Sensitivity of cytology is rather low with high specificity, while HPV testing is very sensitive but not specific. The dual-marker stain p16/Ki67 (CİNtec PLUS) has been shown to offer high sensitivity and specificity in triage of women at risk of developing HPV-related precancerous lesions. We evaluated the utility of CİNtec PLUS in women with normal cytology and a positive HPV test, to see if a positive CİNtec PLUS result identifies women more at risk of developing a dysplastic lesion and if this test can be used as a prognostic biomarker.

Methods

A consecutive population of women of 18 years or older was assembled between January 2018 and December 2022 at two different study sites. These were cytology negative for intra-epithelial neoplasia (NILM) and a positive HPV test. A CİNtec PLUS test was performed and follow up cytology collected. Prognostic value of the CİNtec PLUS test for NILM samples and the confounding effect of HPV-subtype, age, university, and follow-up stage were evaluated.

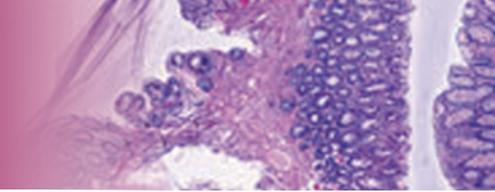
Results

CİNtec PLUS was positive in 63 out of 312 (20%) NILM/ HPV-positive cases. The positive predictive value (PPV) of CİNtec PLUS was 92% for high-grade dysplastic lesion (HSIL), 64% for NILM and 31% for low grade dysplasia. The negative predictive value was 83% for HSIL, 64% for NILM and 83% for low grade dysplasia.

Conclusions

Adding CİNtec PLUS for triaging women with NILM cytology and HPV-positive test can be an important prognostic and straightforward tool to identify women at risk for a high-grade dysplastic cervical lesion. Importantly, the test can also be used in primary HPV screening programs. However, women with low-grade dysplasia remain at risk for over- and under-treatment.





O 06

TRAVELLERS FROM THE INTESTINE TO THE SKIN: A USEFUL CLUE TO DIAGNOSE A CRYPTIC INFECTION.

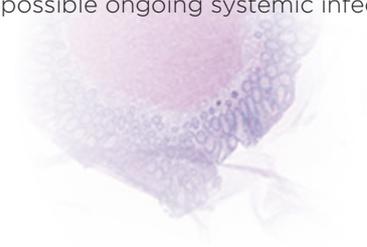
Emanuele Frigo¹, Astrid Lammertyn², Birgit Reyn², Francesca Maria Bosisio²

1- University of Milan, Milan, Italy

2- Universitair Ziekenhuis Leuven, Leuven, Belgium

Abstract

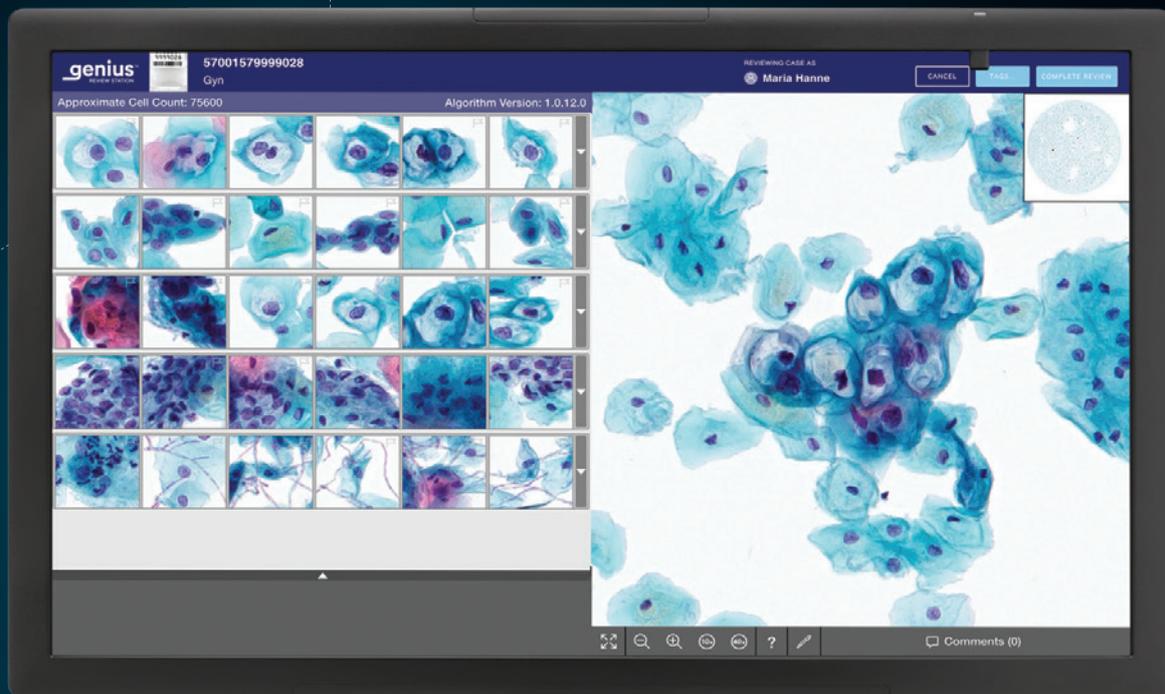
A 61 years old woman from Missouri (USA) with a two-year history of deceased-donor kidney transplant presented to our dermatology department with multiple acneiform lesions on the face as well as numerous erythematous papules and nodules progressively spreading to both arms and legs. Biopsies revealed multiple invasive squamous cellular carcinomas associated with an unusual dense histiocytic infiltrate as well as nodular aggregates of foamy histiocytes. Following the acute onset of fever, pancytopenia and signs and symptoms of an ulcerative colitis, a disseminated histoplasmosis was suspected. A biopsy taken from a rectal ulcer revealed numerous histiocytes with intracellular uniform oval-shaped yeasts that were positive for the Periodic acid-Schiff and Grocott-Gomori methenamine silver fungal stains. A polymerase chain reaction assay confirmed the diagnosis of histoplasmosis. Antifungal therapy with Amphotericin B and Itraconazole led to healing of the skin lesions with scarring and post-inflammatory hyperpigmentation. In conclusion, this case is an exceptional example that warns pathologists that whenever cutaneous lesions are found associated with a dense infiltrate of foamy histiocytes, a careful clinical and pathological screening should be promptly initiated to exclude any possible ongoing systemic infection.



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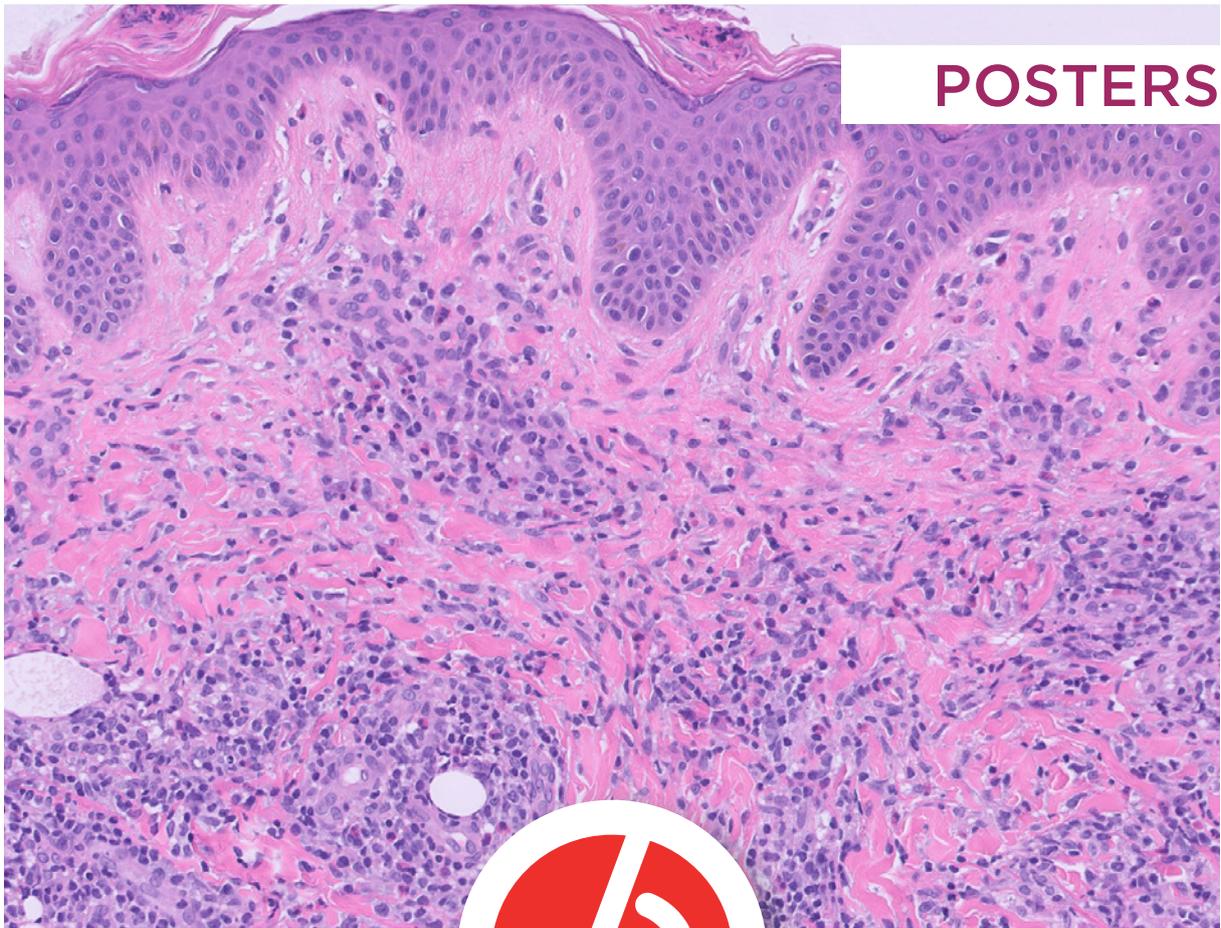
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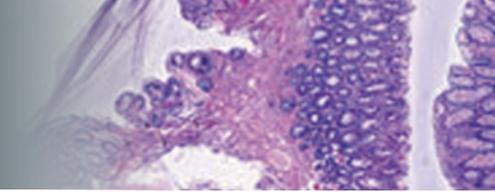
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POSTERS



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P01**EXPRESSION OF PD-L1 IN OVARIAN SURFACE EPITHELIAL TUMORS; A TMA STUDY WITH CLINICO-PATHOLOGICAL CORRELATION**

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Mohammad Arafa^{1,2}*

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2- Pathology Department, College of Medicine and Health Sciences, Sultan Qaboos University, Muscat, Oman.

3- Department of Allied Health Sciences, College of Medicine and Health Sciences, Sultan Qaboos University, Muscat, Oman.

Abstract**Background and Objectives**

Primary ovarian carcinomas account for a significant cancer related deaths in women, and has the highest death rate of female reproductive organ cancers. Programmed cell death protein 1 (PD1), functions as an immune checkpoint, and plays an important role in down-regulating the immune system by preventing the activation of T-cells, which in turn weakens autoimmunity and promotes self-tolerance. This study aimed at the evaluation of PD-L1 immunohistochemical (IHC) expression in different primary surface ovarian epithelial tumours and its correlation with clinicopathological parameters and with the expression patterns of a panel of P53, PR and PR.

Materials and Methods

A set of 102 cases of surface ovarian epithelial tumours (benign, borderline and malignant) were collected to construct a Tissue Microarray (TMA) using three tissue cores from each case. IHC for PD-L1, p53, ER and PR was performed. The PD-L1 expression was evaluated in relation to the clinic-pathological parameters and to the expression patterns of other markers.

Results

PD-L1 was expressed in 51.4% of malignant tumours. The malignant group significantly showed PD-L1 positivity compared to borderline and benign groups. The malignant tumours significantly showed PD-L1 and total p53 positivity compared to borderline group. Also, malignant tumours significantly showed higher

combined positivity of PD-L1 and either PR or ER compared to borderline and benign lesions. No significant correlation was observed between PD-L1 expression and any of the clinic-pathological parameters. TMA cores from benign and borderline cases were more liable to be non-representative or lost during sectioning compared to the malignant ones.

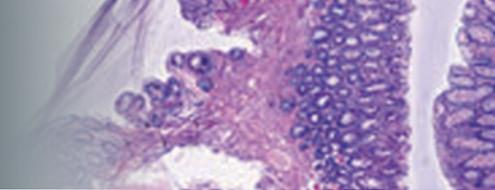
Conclusions

PD-L1 is expressed significantly in malignant tumours. Construction of a panel of IHC markers, including PD-L1, could be of value to define patients those might benefit from immunotherapy. TMA spot adequacy is better for malignant lesions, due to their wider surface areas, compared to borderline or benign counterparts.

Key Words

PD-L1, carcinoma, ER, PR, P53





P 02

CLINICO-PATHOLOGICAL FEATURES OF BREAST CARCINOMA PATIENTS WITH IMMUNOHISTOCHEMICAL EQUIVOCAL HER-2

Yaqeen Al-Zadjali, Afrah Al-Rashdi, Samya Al-Husaini, Suaad Al-Badi, Hajer Al-Badi, Mohammad Arafa

Pathology Department, College of Medicine and Health Sciences, Sultan Qaboos University and Sultan Qaboos University hospital, Oman.

Abstract

Background and objective

Assessment of HER2 gene status has central role in the management of breast cancer patients. Immunohistochemistry (IHC) and fluorescence insitu hybridization (FISH) are the most commonly used tests to determine HER2 status. IHC scores of 3+ and 1+ have been called as HER2 positive and negative, respectively. On the other hand, HER2 equivocal cases (2+) need further confirmation using FISH test. This study aimed to identify the clinico-pathological characteristics of patients with HER2 equivocal tumors served by Sultan Qaboos University Hospital (SQUH) in Muscat, Oman, with emphasis on treatment plans and disease outcome.

Materials and Methods

This was a retrospective cross-sectional study performed using data of patients from 2016 to 2020. A total of 108 patients diagnosed with HER2 (2+) breast cancer were enrolled in this study. The patients' data were analyzed in relation to the subsequent FISH status.

Results

Among the 108 female patients (out of total 1197 breast cancer cases), 22 (20%) were FISH positive, 64 (59%) were FISH negative 17 (16%) were FISH borderline and 5 (5%) with no results. Regarding patient's characteristics, 91.2% had invasive ductal carcinoma, 93.2% expressed estrogen receptors (ER) and 77.6% expressed progesterone receptors (PR). Age, post-menopausal histopathology, tumor grade, TNM staging, ER, PR, Ki67, LVSI, neutrophil-to-lymphocyte ratio (NLR), treatment and follow up did not show significant association with different FISH results.

Conclusions

The majority of HER2 equivocal breast cancer cases were FISH negative. FISH negative cases express ER and PR more than FISH positive ones.

Keywords

Breast carcinoma, equivocal HER2, IHC, FISH.



P03**DIRECT CORRELATION OF ¹⁸F-FDG MICRO-PET/CT WITH HISTOPATHOLOGY IN BREAST CANCER**

Luna Maris^{1,2}, Menekse Göker³, Kathia De Man⁴, Bliede Van den Broeck⁴, Vincent Keereman^{1,2}, Koen Van de Vijver^{5,6}, Christian Vanhove^{1,7}

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Background and Objective

¹⁸F-Fluorodeoxyglucose (¹⁸F-FDG) positron emission tomography (PET) with computed tomography (CT) currently has limitations in breast cancer (BCa) detection as sensitivity depends on the lesion's size and histology. It is especially difficult to detect ductal carcinoma in situ (DCIS) and invasive lobular carcinoma (ILC), which generally show lower uptake than invasive carcinoma of no special type (NST). However, it is unclear how this is explained by the underlying histopathology. We directly correlated sub-millimetre (micro-)PET/CT images of BCa specimens with histopathology, to get insight in how different breast tissues correlate with ¹⁸F-FDG uptake and to investigate whether micro-PET can distinguish (pre)malignant from benign breast tissue.

Materials and Methods

We imaged specimens of 13 patients who underwent breast-conserving surgery after injection with 0.8MBq/kg ¹⁸F-FDG. Specimens included 9 NST, 3 ILC, and 1 DCIS case. We sliced the specimens into ±2mm-thick lamellas, and imaged two lamellas per specimen with sub-millimetre PET/CT. Afterwards, we obtained one H&E-section per lamella and captured whole-slide images (WSIs). We aligned PET/CT images and WSIs through deformable co-registration. The WSIs were annotated to quantify PET standardized uptake values (SUVs) of different tissues.

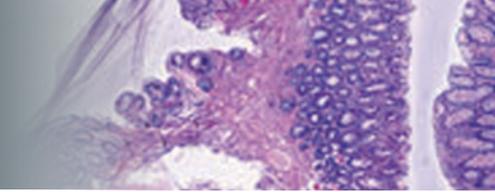
Results

PET/CT images and WSIs showed accurate alignment. Transferring the histopathology annotations to the PET/CT images, resulted in the following mean tumour SUVs across patients: 3.01±2.93, 1.32±0.64, and 1.16±0.94 for NST, ILC, and DCIS respectively. The SUVs for inflammatory, connective, adipose, and healthy glandular tissue were found to be 2.26±3.26, 0.55±0.69, 0.16±0.14, and 0.37±0.34.

Conclusions

We collected a unique dataset of sub-millimetre ¹⁸F-FDG-PET/CT images of BCa specimens, that were co-registered with annotated histopathology images. This dataset gives insight in breast SUVs at a sub-millimetre resolution. The results indicate that NST, ILC, and DCIS can be distinguished from benign tissue. As expected for ¹⁸F-FDG, notable uptake is also detected in inflammatory tissue.





P 04

BLIND VALIDATION OF MSINTUIT CRC, AN AI TOOL FOR MSI PRE-SCREENING FROM COLORECTAL CANCER H&E SLIDES

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Background

MisMatch Repair deficiency (dMMR) / Microsatellite instability (MSI) is a crucial biomarker in colorectal cancer (CRC) predictive of response to immunotherapy and Lynch syndrome. With the growing numbers of biomarkers screened in clinical practice, dMMR/MSI testing, diagnosed by immunohistochemistry (IHC) and/or polymerase chain reaction (PCR), contributes to increasing pathologists workload and delaying therapeutic decisions. Artificial intelligence (AI) models detecting MSI tumors directly from H&E slides have shown promise in improving MSI patients' diagnosis. MSIntuit, the first CE-marked AI-based pre-screening tool for MSI detection from H&E whole slide images (WSI) of CRC surgical resection specimens, outputs if the patient is likely to be MSI and should get further testing. In this study, we performed a blind validation of MSIntuit on a large external cohort of consecutive CRC.

Methods

H&E WSI of 600 consecutive resected CRC (n=123 dMMR/MSI cases) diagnosed at Medipath pathology laboratories in 2017/2018 were studied. dMMR status was assessed using IHC for the 4 MMR proteins, and confirmed by PCR for doubtful cases. Slides were digitized with 2 scanners (Phillips UFS, Roche DP200) and 30 dMMR/MSI WSI were used to calibrate the tool on each scanner. Inference was done on the remaining 570 patients blinded to their status. Automated quality check (QC) discarded WSI that did not meet the tool requirements (large blurry/artifact regions, too few tumor tissue).

Results

QC led to the exclusion of 5% / 2% of WSI digitized with DP200 / UFS scanners, respectively. MSIntuit reached sensitivity/specificity of 0.98 [0.95-1.0] / 0.46 [0.42-0.5] on DP200 scanner and 0.96 [0.91-0.98] / 0.47 [0.43-0.51] on UFS scanner.

Conclusions

MSIntuit reaches sensitivity comparable to gold standard methods (92-95%) while reducing almost by 40% the number of patients to screen with standard techniques, paving the way for its use in clinical practice.



P05

FIBROBLAST ACTIVATION PROTEIN- α , A MARKER OF FIBROBLAST FOCI IN IDIOPATHIC PULMONARY FIBROSIS

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Background and objectives

Idiopathic pulmonary fibrosis (IPF) is an irreversible interstitial lung disease with a median survival of 3-5 years. Fibroblast activation protein- α (FAP α) is a marker of activated fibroblasts and its expression is found in fibroblast foci of IPF patients. We first confirmed this immunohistochemistry staining and evaluated whether the number of fibroblast foci and the intensity of the staining were associated with prognosis.

Materials and Methods

Formalin-fixed paraffin-embedded samples from IPF patients were obtained from the biobank of the Pathology department of the Erasme hospital. Forty-three samples of IPF patients with a follow-up of at least 4 years and with typical features of usual interstitial pneumonia were included: 12 cryobiopsies, 17 surgical lung biopsies and 14 lung explants. Two consecutive sections were obtained and stained respectively with hematoxylin-eosin and anti-FAP α antibody. Slides were scanned and fibroblast foci were identified in order to obtain the number of fibroblast foci per mm² (foci/mm²) and the Quick-score that integrates the intensity and the surface of the staining. These two parameters were correlated with the decrease of the diffusion capacity of carbon monoxide (DLCO) and survival.

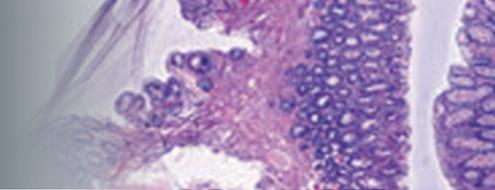
Results

No difference regarding the number of foci/mm² and the Quick-score was observed according to the type of sample. IPF patients who died within 3 years (n=24) presented a significantly higher number of foci/mm² compared to patients still alive (n=7, p=0.047) and a trend compared to patients who died after more than 3 years (n=12, p=0.055). A significant and negative correlation was also observed between the number of foci/mm² and the decrease of DLCO (r=-0.49, p=0.001). Regarding the Quick-score, no significant difference was shown regarding survival and DLCO decrease.

Conclusions

The staining of FAP α helps to identify fibroblast foci in lung slides from IPF patients and the number of foci/mm² seems to be a marker of severity, associated with prognosis and decreased respiratory function.





P 06

UTERINE TUMOR RESEMBLING OVARIAN SEX CORD-STROMAL TUMOR (UTROSCT): REPORT OF A CASE WITH UNCOMMON CLINICAL PRESENTATION

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Introduction

Tumors of the uterus resembling ovarian sex cord tumors (UTROSCT) are divided into 2 groups: group 1, endometrial stromal tumors, and group 2, mural uterine tumors-both with elements resembling ovarian sex cord tumors. In the former, the sex cord component constitutes a minor portion of an endometrial stromal neoplasm, whereas in the latter, it is the predominant or exclusive component of a uterine wall lesion. We report here a new case of UTROSCT, group 2, with a very particular presentation.

Case report

The patient was a 52 woman, G3P3 A0, post-menopausal, with significant past medical history. She was routinely admitted to our department general surgery for a laparoscopic para-umbilical hernia repair. Intraoperatively, there was much viscid gelatinous material within the peritoneal cavity. In view of these unexpected findings, a detailed laparoscopic exploration with multiple peritoneal biopsies and peritoneal lavage was undertaken. Histopathology of these specimens revealed a combination of spindle and epithelioid, round-ovoid cells arranged in cords or clusters with variable growth patterns. Cytology also showed similar morphology. The tumor showed a low proliferation index on Ki67 immunostaining. There was immunoreactivity for Vimentin, Pancytokeratin, CK19, CD99, Desmin, and hormonal receptors. At that stage

a definite diagnosis was not made. However, it was noted that this appeared to be a tumor of low malignant potential. Review of imaging studies indicated a uterine origin for the tumor. In view the diagnostic uncertainty, surgical pelvic exenteration was done. Gross examination showed a huge multi-nodular gray to yellow, firm tumor measuring 40 cm. Tumor originated from the lateral surface of the uterine wall - extending to involve the peritoneal cavity - and herniating into the umbilicus. The adnexa did not show any tumor involvement. Histologically the resection (main) specimen showed morphological features similar to the laparoscopic biopsies. Tumor expressed immune-positivity for inhibin and calretinin. Our proposed diagnosis is of UTROSCT, type 2. One year later the patient is free recurrence or metastasis.

Conclusion

UTROSCT is a rare tumor. The diagnosis is based on the histological and immunohistochemical findings. Our case has the particularly of an uncommon development of the tumor into the peritoneal cavity and sparing the uterine wall. The low proliferation index, its huge size and the way of spread are in favor of its indolent behavior. However surveillance is recommended to detect recurrences.



P07**CASTLEMAN DISEASE (CD): A REPORT OF AN PEDIATRIC INCIDENTAL CASE**

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Introduction

Casleman disease (CD) is a rare, localized or generalized lymphoproliferative disorder with a frequent mediastinal location. It commonly occurs in young adult whilst it rarely appears in childhood.

We report here a case of unicentric CD (UCD), incidentally discovered in a child.

Case report

A 14 year old boy, medically free, is admitted in the department of surgery, for acute right abdomen pain, suspecting acute appendicitis. Surgical investigation of the abdomen cavity showed an inflammatory appendix as well a large mesenteric mass.

Histopathology examination, confirmed the diagnosis of acute appendicitis.

The mesenteric mass, measures 6 cm, showed smooth external surface and grayish homogenous cut surface. Microscopically, enlarged lymph node, with regressive lymphoid follicles showing small germinal centers within the same follicle and hyalinized follicles vessels penetrating the follicles.

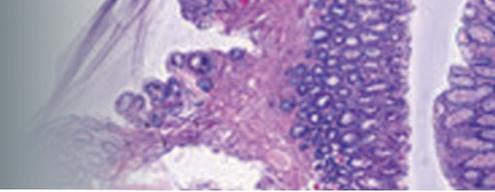
The follicles express Cd20, bcl2 and IgD with few remnants of bcl6 positive germinal centers are seen, surrounded by small CD3-T cells, a subset of which express CD8. HHV8 stain is negative and EBV stain showed rare positive cells.

Hence, the diagnosis UCD, hyaline vascular variant, involving mesenteric lymph node is proposed. The patient is for now under surveillance and no additional treatment is provided.

Conclusion

Pediatric CD still seems underdiagnosed with a significant diagnosis delay, especially for multicentric type, but international new criteria with help in the future. Unlike adult CD, which is strongly associated with HIV and HHV8 infection, pediatric CD seems to be linked to primary activation of innate immunity.





P 08

LOCALLY DESTRUCTIVE LESION OF THE EXTERNAL AND MIDDLE EAR: CHOLESTEATOMA VERSUS VERRUCOUS CARCINOMA

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Background

Verrucous carcinoma and cholesteatoma are two distinct entities that can present with similar clinical and histological features in the ear. Distinguishing between these two entities is crucial due to their different nature (malignant vs. benign), and their implications with regard to prognosis and further management.

Case

A 81 years-old woman with a history of psoriasis presented with hearing difficulties and otorrhea. Clinical examination and imaging findings showed a locally destructive process suggestive for a malignant otitis externa. Inconclusive biopsies led to the decision to perform a subtotal petrosectomy.

Results

Histological examination of the external ear canal revealed epithelial changes including prominent acanthosis along with club-like intradermal growth. The underlying stroma contained a chronic inflammatory infiltrate. Multiple keratin plugs with central hyperkeratosis and parakeratosis were observed, however, atypia of the epithelial cells was minimal. Notably, examination of the posterior wall of

the external ear canal showed bone erosion, interlamellar fibrosis and the presence of a keratin pearl. Based on the bone invasion and imaging suggesting a malignant process, the diagnosis of squamous carcinoma was made. The observed subtle warty architecture and minimal atypia supported the conclusion that verrucous carcinoma was the most fitting diagnosis. Additional immunohistochemical markers, such as PANCK, p53, Ki67, and p16, were utilised. P16 was negative, while P53 and Ki67 displayed strong positive staining in the basal keratinocytes, further supporting the diagnosis.

Conclusion

This case emphasises the challenges in differentiating between verrucous carcinoma and cholesteatoma due to their overlapping clinical and histological features. However, distinct histopathological and clinical characteristics allow for the differentiation between these two entities. Making an accurate differential diagnosis is important to determine appropriate management strategies and prognosis for patients.



P09

INTRAVASCULAR LARGE B-CELL LYMPHOMA INVOLVING THE LUNG: A DOUBLE CASE REPORT.

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Background

Intravascular large B-cell lymphoma (IVLBCL) is an extremely uncommon large B-cell malignancy. This aggressive lymphoma is defined by the presence of atypical B cells in blood vessels and a very heterogeneous clinical presentation.

Case reports

We describe two cases of IVLBCL with lung involvement.

The first patient, a 65-year old man, presented with fever, dyspnea, persistent cough and inexplicable hemolysis. Previous biopsies and imaging suggested a hypersensitivity pneumonia. A surgical biopsy showed nodular lesions where small interstitial capillaries contained large, atypical lymphoid cells, expressing immunohistochemically CD20 and PAX5, weakly CD10, but no CD3. A skin lesion showed a similar immuno-profile. Treatment included chemotherapy, and corticosteroids for secondary hemophagocytic lymphohistiocytosis. One month after the last administration of chemotherapy, the patient showed a good clinical, biochemical and radiological response.

The second patient, a 65-year old woman, died suddenly due to multiple organ failure (MOF), with an extremely elevated blood lactate, and a clinical suspicion of hematological malignancy. An autopsy confirmed multiple organ involvement including the lung and an underlying blood clotting disorder - with numerous skin and serosal petechiae. Histological and immunohistochemical analysis of multiple biopsies showed

diffuse infiltration by an IVLBCL with immunohistochemical PAX5-positivity in liver, adrenal glands, bone marrow, spleen, kidneys, lung, retroperitoneal and epicardial fat and the body of vertebra S1. The main cause of death was assumed to be severe hemophagocytosis with subsequent MOF and clotting disorder.

Conclusion

The interest of these case reports is to rise the awareness of the very atypical presentation of IVLBCL in the lung, which can be misleading and delay the diagnosis of this aggressive lymphoma. As these tumors can affect any organ, the clinical presentation is very diverse and needs careful pathological examination and a wide differential diagnosis.



P 10

BILIARY ADENOFIBROMA: A BLACK SHEEP IN WHITE SHEEP'S CLOTHING CASE REPORT AND LITERATURE REVIEW

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Abstract

Case presentation

A 76-year-old woman underwent liver segmentectomy for a single nodule which had been difficult to characterise on imaging. The lesion was first identified 4 years ago during follow-up imaging of a massive biliary cyst but had steadily increased in size over time. Initially, MRI showed a well circumscribed homogenous lesion suggestive of a liver hemangioma. However, over the years, the nodule grew larger, developed irregular margins, an increasingly prevalent fibrous stroma and exhibited a strong peripheral rim enhancement. The occurrence of these new features led to believe the nodule could in fact be malignant and surgical resection was performed.

Gross examination showed a 2 cm cystic whitish lesion with irregular margins, surrounded by greenish spots. Microscopic examination demonstrated a proliferation of glandular structures, at times branching, forming complex patterns, at times dilated and cystic, embedded in a collagenous fibrous stroma. The glands were lined by even cuboidal cells, with preserved polarity, an amphophilic cytoplasm and monotonous round nuclei with inconspicuous nucleoli. Some dilated glands were filled with red blood cells or an eosinophilic material. Focally, small apocrine snouts and oncocytic changes were observed. No cytological atypia or mitotic activity was noted. Immunohistochemical profile favoured a biliary phenotype. PAS staining did not highlight any mucus. The proliferation index was low and p53 expression remained wildtype.

Discussion

Biliary adenofibroma (BAF) is a rare hepatic tumour. Since its discovery in 1993, only a handful of cases has been reported. Malignant transformation has been identified in several cases, leading to the recognition of BAF as a possible precursor lesion for peripheral intra-hepatic cholangiocarcinoma.

Due to the rarity of the lesion, its microscopic features, pathogenesis and prognosis are still poorly understood. The aim of this case presentation is to review the existing literature in order to better understand this entity and the criteria for malignant transformation.



MammaTyper®

Comprehensive molecular subtyping of breast cancer patients – Clinical results

MammaTyper® is a molecular *in vitro* diagnostic test for precise, quantitative detection of the mRNA expression status of the genes HER2, ER, PR and Ki-67 in human breast cancer tissue. The combination of the four biomarkers enables the assessment of the different St. Gallen Breast Cancer molecular subtypes which provide prognostic information and are key parameters for treatment decisions in this cancer entity: Luminal A, Luminal B, HER2-positive and Triple-negative.

MammaTyper® is an alternative approach to conventional immunohistochemistry (IHC) and hybridisation techniques, i.e. *in situ* hybridisation (ISH) and fluorescence *in situ* hybridisation (FISH), for the molecular subtyping of breast cancer patients with an invasive disease.

Key facts

- ✓ CE-marked IVD RT-qPCR assay for most commonly available thermocyclers
- ✓ Easy-to-use, quantitative and observer-independent testing
- ✓ Results within the same day because of the fast turnaround time
- ✓ Precise determination of HER2, ER, PR and Ki-67 in one assay
- ✓ Definitive breast cancer subtyping for confident treatment decisions



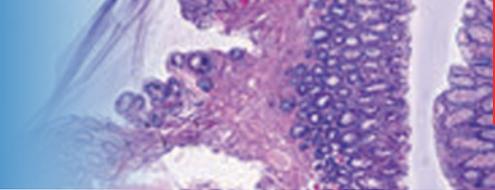
Several studies have shown a high concordance rate between MammaTyper® and IHC (Table 1), and recent results have demonstrated that MammaTyper® is a valuable alternative to IHC/FISH for discriminating the HER2-low subtype due to its higher accuracy in the detection of HER2 expression [2]. The excellent performance was confirmed in the study by Liu *et al.* [1] in which MammaTyper® was able to accurately stratify patients into prognostic groups based on their HER2 status. Especially nowadays, an accurate assessment of the HER2 status is of utmost importance, with the latest drugs being approved for this population.

MammaTyper® meets the need for standardised, quantitative and fast molecular subtyping enabling confident treatment.

Table 1 Concordance of MammaTyper® versus immunohistochemistry deriving from several clinical studies.

References	# Samples	Concordance MammaTyper® versus immunohistochemistry (%)			
		HER2	PR	ER	Ki-67
Wallwiener (2014)	28	100	81.5	81.9	n.a.
Deutsch (2015)	27	n.a.	85.2	70.4	50.0
Wirtz (2015)	9	88.9	88.9	88.9	44.5
Wirtz (2015)	719 (HER2), 719 (PR), 719 (ER), 688 (Ki-67)	91.8	82.5	91.8	75.0
Sinn (2017)	54	n.a.	92.9	91.2	n.a.
Stefanovic (2017)	67 (primary tumor)	100	70.0	81.0	n.a.
Stefanovic (2017)	67 (metastatic site)	89.0	78.0	84.0	n.a.
Fasching (2018)	418	84.9	82.4	91.5	n.a.
Teng (2018)	174 (HER2), 236 (PR), 240 (ER), 212 (Ki-67)	99.4	91.1	95.4	90.1
Saracchini (2019)	72 (HER2), 76 (PR), 76 (ER), 76 (Ki-67)	93.0	76.3	92.1	92.1
Hipfel (2019)	1.641 (HER2), 1.568 (PR), 1.628 (ER), 1.586 (Ki-67)	92.8	86.9	92.9	77.4
Shaaban (2020)	126 (HER2), 132 (PR), 132 (ER), 47 (Ki-67)	95.0	89.4	95.5	87.2
Median in %		92.9	83.9	91.4	77.4

Abbreviations: **HER2** – human epidermal growth factor receptor 2; **ER** – estrogen receptor; **PR** – progesterone receptor, **Ki-67** – marker of proliferation, **n.a.** – not available



FRIDAY

SATURDAY

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