



ImmunoScience Academy

Partnering for Education & Optimizing Treatment in ImmunoScience

Welcome and introduction

Scott Cooke

General Manager Benelux, BMS



Today's participants



Scott Cooke
General Manager,
Benelux, BMS



Paul Lacante
Medical Director,
Benelux, BMS



Sabine De Beuf
Public Affairs Lead,
Benelux, BMS



Vanessa Lissens
External Partnership
Manager Oncology, BMS



Prof. dr. Pierre Coulie
Immunologist
de Duve Institute, UCL



Agenda

09.30: Bristol-Myers Squibb partnership by Mr Scott Cooke

09.45: Presentation of the ImmunoScience Academy by Prof. dr. Pierre Coulie

- Need for education on immunology and immunotherapies
- Presentation of the ImmunoScience Academy and the Steering Committee
- Unveiling the program and the website

10.15 : Modern concepts in immunology and clinical relevance by Prof. Coulie

11.15 : Closing by Dr. Paul Lacante

11.20 : One-to-one interview opportunities with prof. dr. Coulie, Mr. Scott Cooke and Dr. Paul Lacante



Our Mission

To
discover,
develop and
deliver innovative
medicines...

that help patients prevail over serious diseases.

WHO ARE *you* WORKING FOR?

 Bristol-Myers Squibb





The Academy
BMS Partnership





ImmunoScience Academy

Partnering for Education & Optimizing Treatment in ImmunoScience

Introducing the ImmunoScience Academy

Prof. dr. Pierre Coulie

Immunologist de Duve Institute - UCL



Breakthrough of the Year 2013

CANCER IMMUNOTHERAPY

T cells on the attack



FEBRUARY 23, 2004

BUSH'S
MILITARY RECORDS
IS DISNEY MOUSETRAPPED?

TIME

THE SECRET KILLER

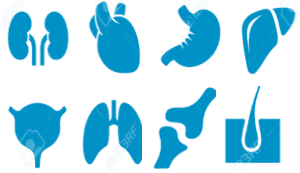
- The surprising link between **INFLAMMATION** and HEART ATTACKS, CANCER, ALZHEIMER'S and other diseases
- What you can do to fight it

www.time.com AOL Keyword: TIME



Advisory Board on Immunology and immunotherapies

Nov 21st 2016 - outcomes



- Increasing importance across **different therapeutic areas**



- The need for **regular updates**



- The need for **multidisciplinary** educational initiatives/materials

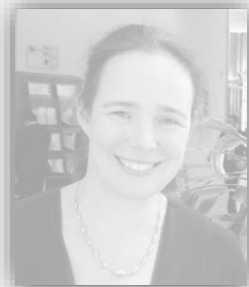


The Steering Committee

					
<p>Prof Dr P. Coulie (Chair) <i>De Duve Institute - UCL</i> Immunology</p>	<p>Prof Dr A. Awada <i>Jules Bordet Institute</i> Medical oncology</p>	<p>Prof Dr V. del Marmol <i>Hospital Erasme</i> Dermatology</p>	<p>Prof Dr G. Jérusalem <i>CHU Liège</i> Medical oncology</p>	<p>Prof Dr T. Kerre <i>UZ Gent</i> Haematology</p>	<p>Prof Dr B. Lauwerys <i>CU Saint Luc - Bxl</i> Rheumatology</p>
					
<p>Prof Dr P. Pauwels <i>UZ Antwerpen</i> Pathology</p>	<p>Dr. S. Rauh <i>CHEM Luxembourg</i> Internal Medicine- Oncology</p>	<p>Prof Dr R. Schots <i>UZ Brussel</i> Haematology</p>	<p>Prof Dr J.F. Vansteenkiste <i>UZ Leuven</i> Pulmonology- Oncology</p>	<p>Prof Dr E. Van Cutsem <i>UZ Leuven</i> Digestive Oncology</p>	<p>Prof Dr K. Vermaelen <i>UZ Gent</i> Pulmonology- Oncology</p>



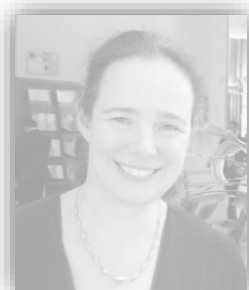
The Steering Committee



Prof Dr P. Coulie
(Chair)
De Duve Institute -
UCL
Immunology



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Prof Dr A. Awada
Jules Bordet Institute
Medical oncology



The Steering Committee



**Prof Dr V.
del Marmol**
Hospital Erasme
Dermatology



The Steering Committee



Prof Dr G. Jérusalem
CHU Liège
Medical oncology



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Prof Dr T. Kerre
UZ Gent
Haematology



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Prof Dr B. Lauwerys
CU Saint Luc – Bxl
Rheumatology



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Prof Dr P. Pauwels
UZ Antwerpen
Pathology



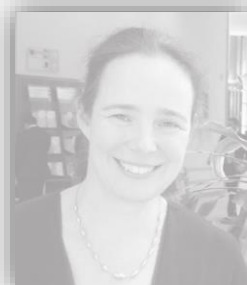
The Steering Committee



Dr. S. Rauh
CHEM Luxembourg
**Internal Medicine-
Oncology**



The Steering Committee



**Prof Dr R.
Schots**
UZ Brussel
Haematology



The Steering Committee



**Prof Dr J.F.
Vansteenkiste**
UZ Leuven
**Pulmonology-
Oncology**



The Steering Committee



**Prof Dr E. Van
Cutsem**
UZ Leuven
**Digestive
Oncology**



The Steering Committee



**Prof Dr K.
Vermaelen**
UZ Gent
**Pulmonology-
Oncology**





ImmunoScience Academy

*Partnering for Education & Optimizing
Treatment in ImmunoScience*

A unique multidisciplinary
educational program providing
information on immunology and
immunotherapies to help improve
patient outcomes

Our mission is to provide education and enhance
multidisciplinary initiatives within the immunoscience field to
help improve patient outcomes



EDUCATION
IS THE MOST POWERFUL
WEAPON WHICH YOU
CAN USE TO
CHANGE
THE WORLD

NELSON
MANDELA



The ImmunoScience Academy: education @ launch

Core educational slide deck

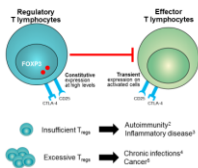
Module 1. Basic immunology	
Section	# slides
Introduction to the immune system	11
Innate immunity	11
Adaptive immunity	3
Adaptive immunity: B cells	6
Adaptive immunity: T cells	18
Summary	1
TOTAL	50

*Slide numbers in grey are to be confirmed, once outline is developed – numbers exclude title slides and divider slides.
 †These slides may already be covered in Immuno-oncology TBC, to be determined.

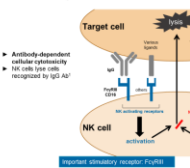
www.immunoscienceacademy.be

Regulatory T cells are vital to immune homeostasis

- T_{reg} differentiation and immunosuppressive activity depend on transcription factor FOXP3 (Foxp3) – once die from autoimmunity at an early age
- T_{reg} maintain tolerance to self-antigens and prevent autoimmune disease
- Human T_{reg} do not bear a unique surface marker. They constitutively express high levels of CD25 and CTLA4
- T_{reg} are immunosuppressive through various mechanisms and generally suppress or downregulate induction and proliferation of effector T cells



The innate immune response: controlling NK cell activation¹⁻³



- NK cells and CTLs have complementary roles in immune responses
- CTLs recognize peptides that are derived from tumor and viral antigens (presented by MHC class I) molecules
- In their role as innate effectors, expression of MHC class I on the cell surface is often downregulated
- These cells are thereby able to escape CTL killing
- However, NK cells are able to recognize and kill these cells!



- Innate immunity has a broad function, has a memory, is present from birth and has a rapid response, whilst adaptive immune system is highly specific to pathogens, takes time to elicit a response and adapts over time
 - True
 - False
- Which of the following statements are true:
 - Dendritic cells are very important in priming B-cells
 - Interactions between cells that occur with cell-to-cell contact (contact dependent) are mediated through cytokines
 - Chemokines specialize in attracting cells to particular parts of the body
 - Cytokines always work through very high affinity receptors, act locally and cannot have any endocrine effects
 - All of the above
- Which of the following cells are part of the innate immune system?
 - Macrophages, NK cells, CD4+ T cells, neutrophils and basophils

ImmunoScience Case Study

Managing pneumonitis in a patient with lung cancer

Click anywhere to begin



The ImmunoScience Academy: education coming soon


Core educational slide deck

Module 1. Basic immunology		Module 2. Types of immunotherapies		Module 3. Immunotherapy for malignancies		Module 4. Immunotherapy for non-malignant diseases		Module 5. Immunotherapy AEs and their management	
Section	# slides	Section	# slides	Section	# slides*	Section	# slides*	Section	# slides*
Introduction to the immune system	11	Introduction	4	Introduction	1	Introduction	1	Introduction	2
Innate immunity	11	Checkpoint inhibitors	1	Principles of immuno-oncology	14	Dermatology	3	Principles of adverse event management	4
Adaptive immunity	3	CTLA-4 blockers	5	Immunotherapy for solid tumors	5	Rheumatology	3	AEs according to immunotherapy	5
Adaptive immunity: B cells	6	PD / L-1 blockers	5	Immunotherapy for hematologic malignancies	7	Pulmonology	3	AEs according to organ system	6
Adaptive immunity: T cells	18	Anti-TNF agents	3	Summary	1	Gastroenterology	3	Summary	1
Summary	1	Other monoclonal antibodies	4	TOTAL	28	Summary	1	TOTAL	18
TOTAL	50	CAR T cells	4			Summary	1		
		Other immunotherapies	3			TOTAL	14		
		Summary	1			TOTAL	30		

*Slide numbers in grey are to be confirmed, once outline is developed – numbers exclude title slides and divider slides.
 †These slides may already be covered in immuno-oncology TBD, to be determined.

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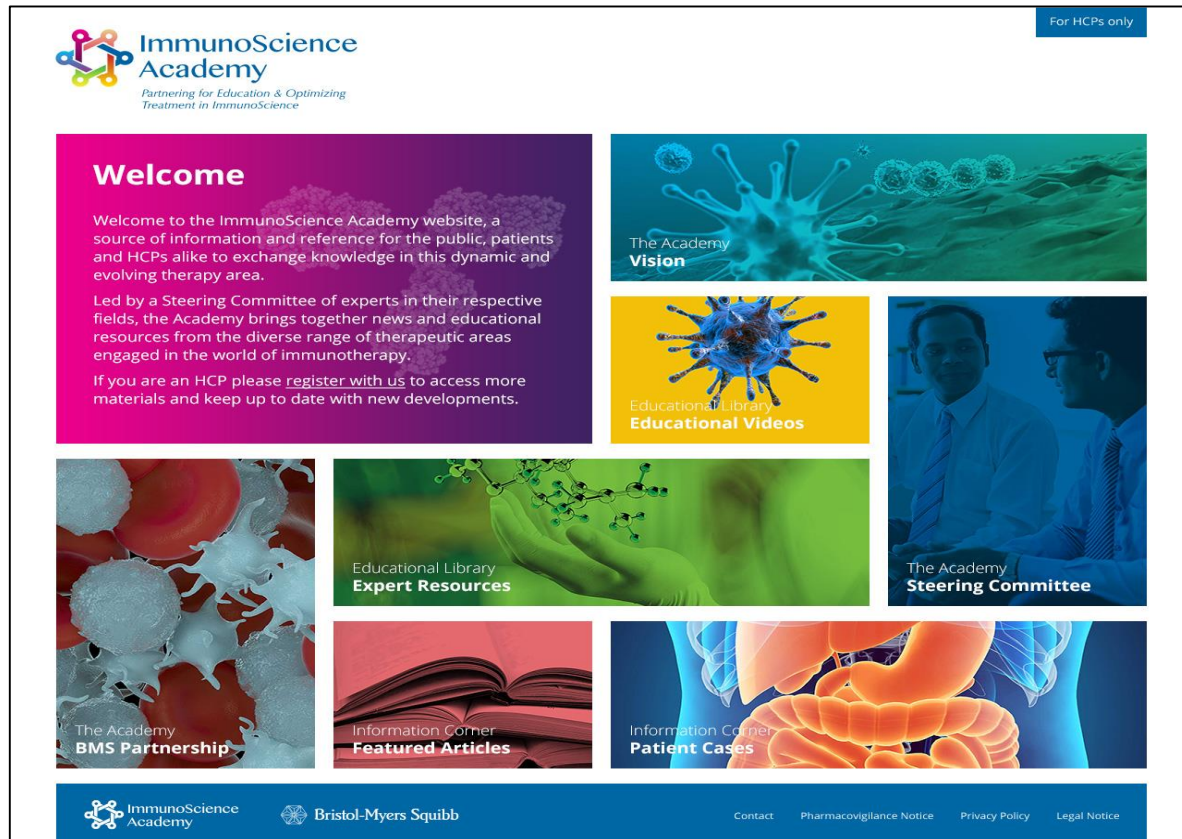
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ImmunoScience Case Study
 Managing pneumonitis in a patient with lung cancer

Click anywhere to begin



The ImmunoScience Academy website



- ▶ **MDs** will be able to log in to get **exclusive** and **full access** to the educational resources
- ▶ The ImmunoScience Academy website is an online platform that will serve as a **regularly updated source of information**

www.immunoscienceacademy.be





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Close

Dr Paul Lacante

Medical Director Benelux, BMS

