



News frontiers in cancer immunotherapy

Annecy, Les Pensières, July 9-11, 2007

A number of different cancer vaccines are able to generate significant frequencies of tumour or tumour antigen specific T cells in the peripheral blood of patients with cancer. However, it is becoming clear that additional immunologic manoeuvres will be required to enhance the functional antitumour activity of these immune effectors cells. A critical component for the success will be the identification and integration of appropriate "immuno modulators" with these cancer vaccines.

.These various immunomodulators will likely be found to play important and critical roles in maximizing immune responses primed by cancer vaccines. Identification of the most appropriate immunomodulators for a particular vaccine may require pre-clinical modelling as well as early clinical evaluation. The identification of validated immunologic biomarkers will be essential.

Monday, July 9, 2007

17h30-18h30	<i>Registration</i>
18h30-18h45	Welcome Address
18h45-19h15	Keynote lecture
19h45	<i>Welcome Dinner</i>

Tuesday, July 10, 2007

Session I: - How to drive tumor-specific immune response? (08h30-11h00)

There have been continued advances in both the identification of relevant tumour associated antigens and the optimization of various vaccine platforms towards generating relatively high frequencies of specific T cell responses towards these TAAs. These platforms are quite heterogeneous but in various clinical studies share the ability to seemingly break tolerance to self TAAs. It is not yet clear from a clinical perspective whether any particular platform is superior to the other or whether further enhancements in the immunologic response can be achieved by various prime-boost combinations.

08h30-08h50	Dendritic cells approach
08h50-09h05	<i>Discussion</i>
09h05-09h25	Peptide vaccines
09h25-09h40	<i>Discussion</i>
09h45-10h05	Viral approach
10h00-10h20	Targeted antibody approaches
10h20-10h35	<i>Discussion</i>
10h35-11h00	Coffee break

Session II: - How to enhance function of primed T cells? (11h10-16h30)

Several different pathways that regulate the level of activation and effector function of the immune system have been identified and tools to manipulate these pathways are becoming available for clinical evaluation. Immunologic pathways which can now be manipulated in the clinic include: dendritic cells, reagents enhancing T cells activation, cytokines, regulatory T Cells and cytotoxic drugs.

A number of different toll-like receptor agonists are available to provide danger signals to dendritic cells and antibodies to CD40 or CD40 ligand can provide the second signals necessary for complete dendritic cell activation.

Reagents to enhance the level of activation of T cells are now becoming available for clinical evaluation. These include antibodies to CTLA4 and PD1. In addition antibodies to provide enhanced co-stimulatory signals through the 4-1BBligand, CD28, Ox40, CD30 pathways, are entering or about to enter the clinic.

Manipulating TLRs and co-stimulation.

11h10-11h20	Enhancing cancer vaccines with immunomodulators, overview
11h20-11h35	<i>Discussion</i>
11h35-11h55	Anti-CD40 or CD40 ligand
11h55-12h10	<i>Discussion</i>
12h10-14h00	Lunch

TLR Signal

14h00-14h20	TLR 8
14h20-14h35	<i>Discussion</i>
14h35-14h55	Anti CTLA4
14h55-15h10	<i>Discussion</i>
15h10-15h40	<i>Coffee break</i>
15h40-16h00	Anti PD1

16h00-16h15 **Discussion**
 16h15-16h25 4-1 BBLigand pathway
 16h25-16h40 **Discussion**

Manipulating Regulatory T Cells

16h40-17h00 Anti-CD25-Ontak
 17h00-17h15 **Discussion**
 17h15-17h35 IDO pathway for Treg generation and 1MT inhibitor
 17h35-18h00 **Discussion**
 19h00 **Dinner**

Wednesday, July 11, 2007

A number of recombinant cytokines may play important roles in enhancing dendritic cell activation, T cell proliferation, maturation and activation including Interferon, IL2 and IL15. In addition blocking antibodies to inhibitory cytokines such as anti-IL10 are also available in showing promise in enhancing TH₁ responses.

Manipulating Cytokines

08h00-08h20 Anti IL2 and IL2
 08h20-08h40 Interferon
 08h40-09h00 **Discussion**
 09h10-09h30 IL10

Cytotoxic drugs may enhance T cell priming to a variety of tumour antigens and may also play a role in reducing regulatory T cell pathways. Integrating of cancer vaccines with cytotoxic drug combinations is currently being evaluated

Integrating with chemo cytotoxic therapy

09h30-09h50 Metronomic chemo and vaccine therapy
 09h50-10h10 **Discussion**
 10h10-10h40 **Coffee break**

10h40-11h00	MVA-5T4 and colorectal cancer
11h00-11h20	Discussion

Session III: - What kind of appropriate decision can we make today? (11h20-17h00)

11h20-11h50	Biologic significance of tumour T cell infiltrates
11h50-12h10	<i>Discussion</i>
12h10-14h30	Lunch
14h30-14h50	Tregs, Th17 and their regulation in the tumor environment
14h50-15h10	<i>Discussion</i>
15h10-15h50	Monitoring adaptative responses
15h50-16h10	HIV experiences
16h10-16h30	Melanoma experience
16h30-16h50	<i>Discussion</i>
16h50-17h10	Closing remarks
17h10-17h40	End of the meeting