U-BIOPRED study: Open innovation and severe asthma

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Innovation vs. invention distinction

• Invention refers more directly to the **creation** of the idea or method itself
• **Innovation** [from Latin *innovare*: ‘to renew or change’]: the **use** of a better and novel idea or method

Successful innovation is usually coupled with marketing

**Example:**

Edison’s bulb
  - > compact fluorescent (CFL) bulb
  - > light-emitting diode (LED) bulb
Innovation in companies and academic institutions

Universities specialise in research which may lead to inventions and discovery of new research methods, but they are not interested in production.

Due to shareholders’ expectations, companies are mostly interested in innovative products/methods of commercial value that might be marketed.

Bottleneck: research <-> marketing.
The project addresses the current inability of pre-clinical studies to predict clinical efficacy, which is a major bottleneck in drug development for severe asthma.
Aims

- Identify better tools and markers to develop new therapies and diagnostics for severe asthma
- Introduce tools for predicting the effectiveness of future treatments
- Assist in producing new drugs
- Develop a personalised approach to therapy
- Include patients as partners in research
How this will be achieved

- Clinical data from a large cohort
- Omics technology (genomics, transcriptomics, proteomics, lipidomics)
- Animal and laboratory models
- Human challenge models
- Systems biology
Participants & funding

The consortium encompasses the representatives of all stakeholder groups by involving partners from academia (20), biopharma industry (EFPIA) (9), patients/care organisations (6), SMEs (3) and Multinational industry (1)

• **Duration:** 60 months, started 1 Oct 2009
• **Total costs:** 22 846 864 €
• **IMI contribution:** 8 977 151 €
• **EFPIA contribution:** 11 007 989 €
Our aim

Lipidomics of induced sputum – samples of lower airways excretions

material: induced sputum collected from well defined asthmatic patients and controls (n=725)

methods: high performance liquid chromatography – tandem mass spectrometry

measured analytes: 10 key lipid mediators and their metabolites reflecting cyclooxygenases and lipoxygenases inflammatory pathways
Patient/study subject recruitment
## RECRUITMENT (WP3) Preliminary results as of Oct. 5th, 2012

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# Preliminary results of the Polish Team

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EC meeting 31st Sep.

Recruited 3 pts more than target, local CRA supported site to prepare docs for the amendment. Submission will be performed on week 38. Recruitment: investigators are willing to recruit more patients but because of holidays it will be possible at the end of September or even in October. Difficult to specify how many patients can be included more.
Our experience in the field


Preliminary results of the Polish Team (WP7) – mediators/hierarchical clustering
Challenges faced during other projects

- Funding for R&D
- European projects: require that project results are widely available free of charge
- Paradox: patents required as project indicators but products/results may not be commercialised
Challenges faced during U-BIOPRED

- Withdrawal of partner from consortium
- Unknown research framework
- Partner cooperation (formal and scientific)
- Recruitment of subjects (loss of data / enrolled subjects)
- Co-financing
Advantages

+ IMI consortium is an optimum research framework (innovation is possible!)
+ We are already close to our aim 1: Identify better tools and markers to develop new therapies and diagnostics for severe asthma
+ Involvement in new state-of-the-art research
+ Funding for R&D
+ Local capacity/team building
+ Prestige / „good CV line” for future innovative projects
Thank you

Questions?
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