

Press release

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Report on therapeutic progress in 2013: targeted therapies take pole position

49 new drugs or drug combinations were approved by the European Commission in 2013: a figure that underlines the current dynamism of pharmaceutical research. The new drugs released in 2013 focused on **11** therapeutic areas, compared with 18 in 2012. The same trend was seen on the other side of the Atlantic, where the flow of new products was as strong as ever, with **44 new drugs approved**¹.

- Consistent with previous reports on therapeutic progress, cancer therapies continued to dominate, with 16 drugs in Europe and 11 in the USA, representing the majority of drugs approved during the year (a third of the total in Europe and a quarter of those in the US).
- Infectious diseases (with 8 drugs in Europe - 3 to treat HIV and 4 vaccines - and 7 in the USA) and metabolic disorders (7 anti-diabetics in Europe and 4 in the USA) respectively came second and third confirming the vitality of research in these therapeutic areas.

That was the message of the presentation made today by Leem (the French Pharmaceutical Companies Association) of its annual report on therapeutic progress, which was devoted to the case study of rheumatoid arthritis.

Targeted cancer therapies - selective therapies that attack only cancerous cells - took pole position, accounting for 80% of all cancer treatment products approved in 2013.

- The majority of these were tyrosine kinase inhibitors that block the signalling that triggers growth in cancerous cells. An inhibitor of another specific signalling pathway and a monoclonal antibody specifically targeting the HER2 protein were also approved.
- Innovation therefore focused primarily on targeting disease-specific mechanisms, whether blocking the signalling pathways of cells or attacking specific protein receptors.

What is happening today so massively in the field of cancer has already occurred in the flagship discipline of rheumatoid arthritis (RA).

- The use of targeted therapies has had a decisive effect on the treatment of RA. Few rheumatic diseases have known as much therapeutic progress as RA over the past 10 years.

¹ A total of 12 new molecules or molecule combinations were registered with the FDA and in Europe during 2013.

- Improved knowledge of the mechanisms involved and the revolution brought about by anti-TNF biological therapies have together delivered considerable progress in the treatment of this condition, leading to either remission or low-level activity, thereby significantly improving patient quality of life. *"This criterion is essential for patients, and should therefore be taken more fully into account when evaluating drugs"*, stressed Michel Joly, Chairman of the Leem Scientific Affairs Committee. *"Innovation should not be assessed solely in terms of the remission rate or mortality reduction rate, but also in terms of its ability to enable patients to continue working, control chronic fatigue, and delay the onset of disability"*, he continued.

In a global context where the number of patients suffering from chronic illnesses is increasing, especially those with **inflammatory joint disease**² (6 million osteoarthritis patients in France, 1 million with chronic inflammatory rheumatism, 180,000 with Ankylosing Spondylitis³, etc.), the rapid progress made in treating rheumatoid arthritis opens the door to a new research and development model to be adopted : identification of the mechanisms involved in inflammation, development of a drug that targets these mechanisms, extension of research to other inflammatory mechanisms, and development of other targeted drugs...

Further research to overcome rheumatoid arthritis and other inflammatory joint diseases is on the way. As Professor Marie-Christophe Boissier, Director of the INSERM 1125 Rheumatoid Arthritis Physiopathology, Targets and Therapies Unit at Avicenne-Bobigny Hospital, explains: *"We are working towards a more accurate definition of inflammation targets in order to discover new ways of reaching them. Our researches are also revealing the previously unrealised roles played by certain factors in inflammation, which have important, but little investigated, functions in chronic inflammation, including environmental, nutritional and other factors"*.

The official opening on March 19th this of the INSERM 1125 laboratory at the Université Paris-XIII now brings together the combined strengths of joint inflammation research teams and triggers new partnerships with drug companies, ready to take on the curse of inflammatory rheumatic diseases. *"This type of platform creates the right environment for innovation to flourish"*, says Michel Joly, *"and must be accompanied by a regulatory environment and evaluation system that allows rapid patient access to innovative treatments"*.

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² Figures from the Santé 2025 project. Information sheet 35. *Maladies des os et des articulations* by Francis Berenbaum downloadable from www.sante-2025.org

³ Figures from website: <http://www.ameli-sante.fr/spondylarthrite-ankylosante/quest-ce-que-la-spondylarthrite-ankylosante.html>