

German firm gets EU patent for dsRNA modification

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Singapore: German company, Riboxx Pharmaceuticals, received patent from European Patent Office (EPO) on a novel process for the manufacturing of double-stranded RNA (dsRNA) bearing chemical modifications. This is the third patent granted by EPO for Riboxx's technologies so far.

The chemical modification to the backbone of the dsRNA is designed to increase its resistance to enzymatic degradations by endonucleases and exonucleases that are present in biological fluids such as serum.

The resulting in vivo stability of dsRNA manufactured under this process leads to significant increase in its potency compared to the intrinsically unstable dsRNA.

Dr Jacques Rohayem, CEO, Riboxx, said that, "We are very proud to add another novel patent to the IP portfolio of Riboxx. One of the major drawbacks of RNA usage is in its instability in biological fluids. By using our new manufacturing process, both the stability of dsRNA be enhanced."

"A major field of application is immunomodulation by dsRNA molecules such as Toll-like Receptor III (TLR3) agonists. TLR3 agonists are important not just for use as vaccines adjuvants, but particularly in immunotherapy, where stability of TLR3 agonist in body fluids and tissues is crucial for its pharmacokinetics, with a direct impact on the efficacy of the treatment," he said.