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# Danish firm, Aussie instiute to co-develop pathological drugs

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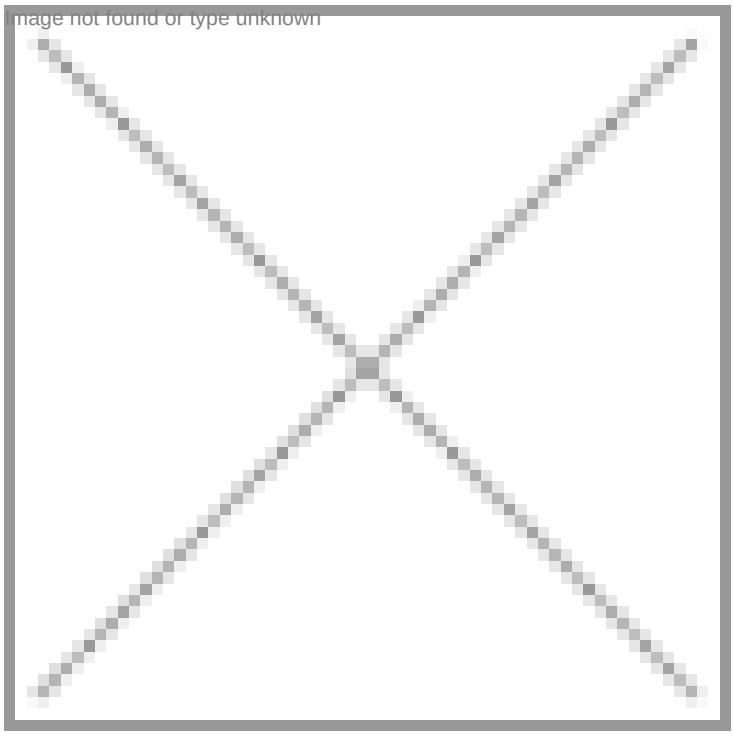


**Singapore:** Danish firm, Mirrx Therapeutics and Australia's Centenary Institute of Cancer Medicine and Cell Biology has formed a collaboration and commercialisation agreement, which formalises a long standing collaboration to discover and develop therapeutic oligonucleotide drug candidates targeting vascular endothelial cadherin (VE-cadherin).

Pharmacological modulation of VE-cadherin expression has the potential to treat a broad range of diseases for which regulation of vascular permeability and angiogenesis are important; including ischemic conditions, inflammation, oedema and solid tumours. The Agreement includes cross-licensing of patents, collaborative research and joint commercialisation activities.

VE-cadherin is a key cell-cell junctional protein in the endothelial lining of the blood vessels that regulates junctional structure and downstream signalling events, including regulation of vascular permeability and promotion of normal angiogenesis.

Mirrx and Centenary have discovered that VE-cadherin expression is regulated, in-part, by the microRNA miR-27a. This negative regulator is itself down-regulated during angiogenic processes (for example after an ischemia event), leading to increased expression of VE-cadherin and reduced vascular permeability and stimulation of angiogenesis.

The collaborators' lead drug candidate, CD5-2, a novel, potent 15-mer oligonucleotide drug, leverages Mirrx' proprietary Blockmir technology to selectively inhibit miR-27a VE-cadherin regulation without affecting miR-27a regulation of its other targets.

In vivo investigation of CD5-2 in a variety of animal models has demonstrated that this drug potently inhibits vascular permeability and promotes angiogenesis, leading to increased blood flow, decreased oedema and faster recovery, for example, in the industry standard hind limb ischemia mouse model.

Dr Thorleif MÃ¸ller, CEO of Mirrx, commented, "We are very pleased to have entered into this partnership with the Centenary Institute, which to the best of our knowledge has provided the first therapeutic in vivo proof of concept for blocking microRNA binding sites in messenger RNA. Moreover, the partnership has validated our 2nd generation Blockmir design with improved specificity and potency. We look forward to continuing our efforts in developing new therapeutic oligonucleotide drug candidates targeting VE-cadherin together with the world class researchers of the Centenary Institute, and believe that this work will provide a new perspective on the field of microRNA based therapeutics."

Professor Mathew Vadas, Executive Director of the Centenary Institute, said, "Leaky blood vessels, as manifest by tissue swelling that can ultimately obstruct blood supply, is a very important clinical problem from the emergency room all the way to rehabilitation. The potential of a useful drug preventing vascular leak is very exciting and we look forward to its clinical development in collaboration with Mirrx."