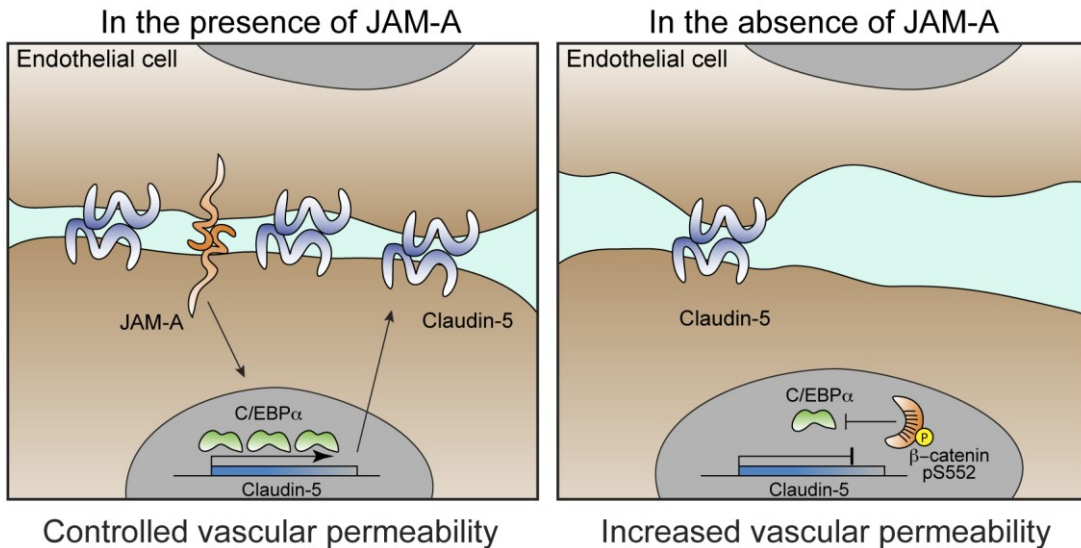


JAM-A Acts via C/EBP- α to Promote Claudin-5 Expression and Enhance Endothelial Barrier Function

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Key findings

1. A signalling circuit that involves JAM-A and claudin-5 and regulates endothelial permeability *in vivo* and *in vitro* has been described.
2. C/EBP- α acts as a transcription factor to trigger expression of claudin-5 downstream of JAM-A, thus restricting endothelial permeability.
3. JAM-A–C/EBP- α –mediated regulation of claudin-5 is dysregulated in the ovarian cancer and glioblastoma vasculature.
4. The elucidation of this pathway might help to identify new therapeutic targets for diseases associated with vascular barrier dysfunction.