

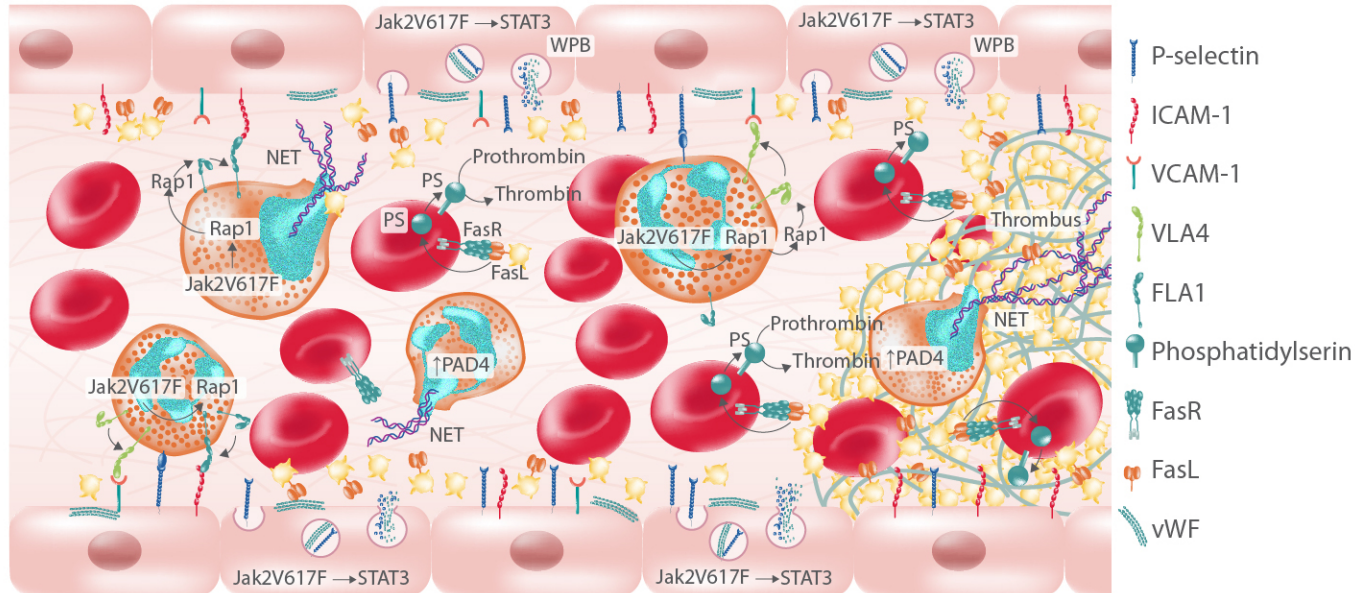
JAK2V617F endothelial cells play a role in thrombus formation



In vitro model of endothelial cells overexpressing JAK2V617F



In vivo model of mice with endothelial-specific JAK2V617F expression



JAK2V617F ECs have a pro-adhesive phenotype associated with increased endothelial P-selectin exposure

- P-selectin is stored in exocytotic organelles called Weibel-Palade bodies (WPB) together with von Willebrand factor (vWF)
- Exocytosis of WPBs leads to cell surface expression of vWF and P-selectin
- The cell surface exposure of P selectin induces leukocyte adhesion and leads to thrombus formation
- Treatment with hydroxyurea decreases P-selectin endothelial expression and thrombus formation