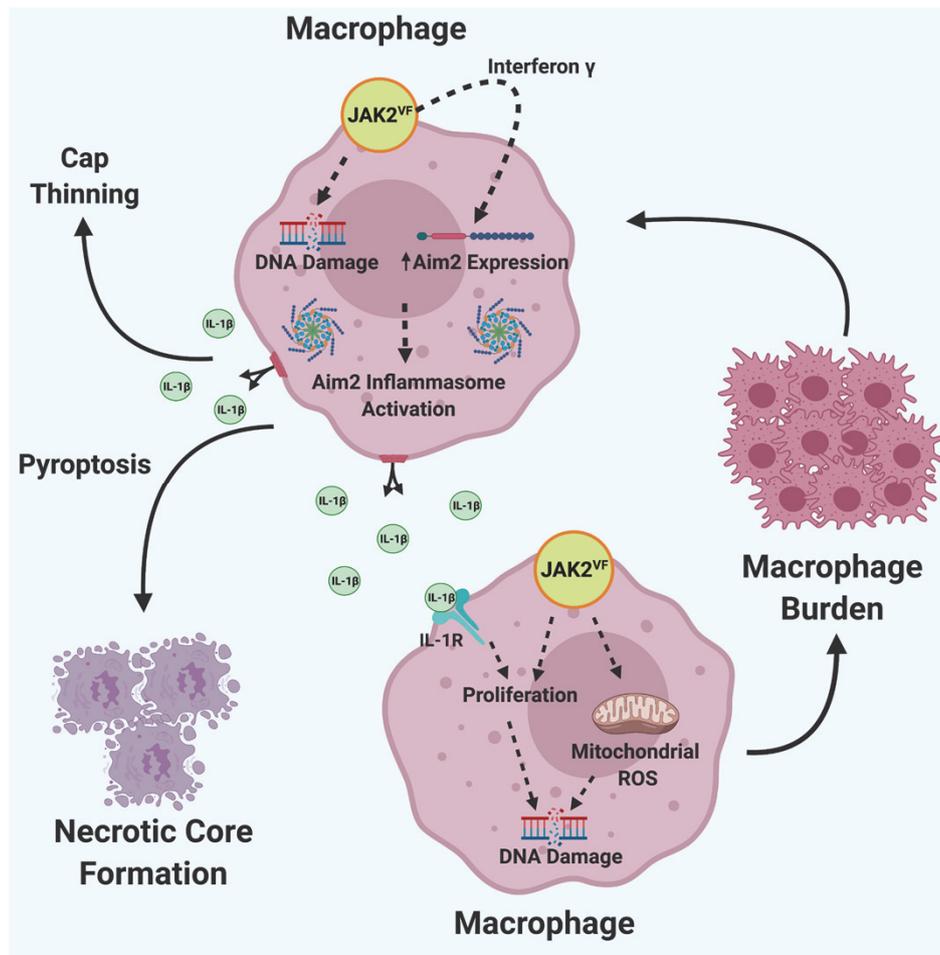


**The AIM2 inflammasome exacerbates atherosclerosis in clonal haematopoiesis.**

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Nature Apr 2021; doi: 10.1038/s41586-021-03341-5



**Key findings**

1. Clonal haematopoiesis (CH) arises from mutations that increase proliferation of haematopoietic cells. CH increases the risk of myocardial infarction and stroke.
2. Amongst the common genetic variants that give rise to CH, the JAK2V617F mutation occurs at a younger age and imparts the strongest risk of premature coronary heart disease.
3. Mice that express Jak2VF selectively in macrophages or model CH show increased proliferation of macrophages and increased necrosis of atherosclerotic plaques.
4. Increased proliferation and glycolytic metabolism in Jak2VF macrophages lead to DNA replication stress, activation of AIM2 inflammasome and aggravated atherosclerosis.
5. Inhibition of IL-1 $\beta$  reduced macrophage proliferation and necrosis while increasing the thickness of fibrous caps, indicating plaque stabilization.