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“Molecular mechanisms of proplatelet formation”

Platelets are essential to maintain proper blood dynamics and control bleeding, and although more than 10 million platelet units are transfused yearly in the United States, the limited availability of donor platelets owing to their 5-day shelf life, potential to induce an immune response, and risk of bacterial contamination is of serious clinical concern. My seminar will discuss novel internal and external mediators of platelet formation from their precursor cells, megakaryocytes. I will explore how these internal and external mediators cause megakaryocytes to make platelets. A better understanding of these proteins will lead to improved therapies for thrombocytopenia, and will therefore reduce morbidity and mortality in the United States.