

elastic fibers of the skin, leading to delayed re-epithelialization and slower healing. Similarly, proteases from *Staphylococcus aureus* cause severe inflammation and damage to healthy tissues, impeding normal wound healing. Studies emphasize that these enzymes contribute to pathological processes in wounds rather than their treatment. Thus, the use of enzymes from these pathogenic microorganisms may worsen tissue conditions and slow regeneration.

The results of the literature analysis indicate that the selection of microbial proteolytic enzymes for wound therapy in animals should be based on their safety, biological activity, and ability to promote regeneration without damaging healthy tissues. Enzymes from *Bacillus* species and *Clostridium histolyticum* demonstrate significant potential for use in veterinary practice, while enzymes from *Pseudomonas aeruginosa* and *Staphylococcus aureus* should be avoided due to their pathogenic effects.

Further research is needed to develop new biotechnological approaches aimed at optimizing the conditions for biosynthesis and application of these enzymes, as well as studying their interactions with damaged animal tissues to enhance regeneration processes. These studies could serve as the foundation for creating innovative therapeutic agents in veterinary medicine.

Using platelet aggregation function for personalized antiplatelet therapy

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Platelet aggregation plays a crucial role in hemostasis and thrombosis, making it a key factor in cardiovascular diseases such as myocardial infarction and stroke. Antiplatelet therapy is widely used to prevent thrombotic events, particularly in patients with atherosclerosis, atrial fibrillation, or those undergoing percutaneous coronary interventions. However, interindividual variability in platelet response to antiplatelet drugs necessitates a personalized approach to therapy.

Assessing platelet aggregation function allows clinicians to tailor antiplatelet therapy based on a patient's specific response to treatment. Various laboratory techniques, such as light transmission aggregometry, impedance aggregometry and thromboelastography with platelet mapping, enable precise evaluation of platelet reactivity. These methods help identify patients who are either resistant or overly sensitive to antiplatelet agents, such as aspirin or P2Y₁₂ inhibitors.

Personalized antiplatelet therapy aims to optimize drug efficacy while minimizing bleeding risks. Patients with high on-treatment platelet reactivity may require alternative or intensified therapy, whereas those with low on-treatment platelet reactivity may benefit from dose reductions to prevent hemorrhagic complications. Genetic factors affecting clopidogrel metabolism, further underscore the need for individualized treatment strategies. Incorporating platelet function testing into clinical practice could improve outcomes by reducing adverse cardiovascular events and ensuring better risk stratification. Future research should focus on refining point-of-care testing, integrating genetic profiling, and establishing standardized guidelines for personalized antiplatelet therapy.

**Lentil (*Lens culinaris*) and lupin (*Lupinus* spp.) proteins
as a promising products of modern biotechnology**

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Proteins serve as food ingredients both for their functional properties and to provide specific characteristics to finished products. While animal-derived proteins are commonly used as functional ingredients in the food industry, they often contain high levels of saturated fat and cholesterol. As a result, industrial food producers are increasingly turning to plant-based proteins as alternatives. Consequently, vegetable