



LAMENESS

Healing with horsepower

Pro-Stride® APS is a regenerative medicine device that concentrates the healing properties of your horse's own blood to naturally manage equine lameness and osteoarthritis.



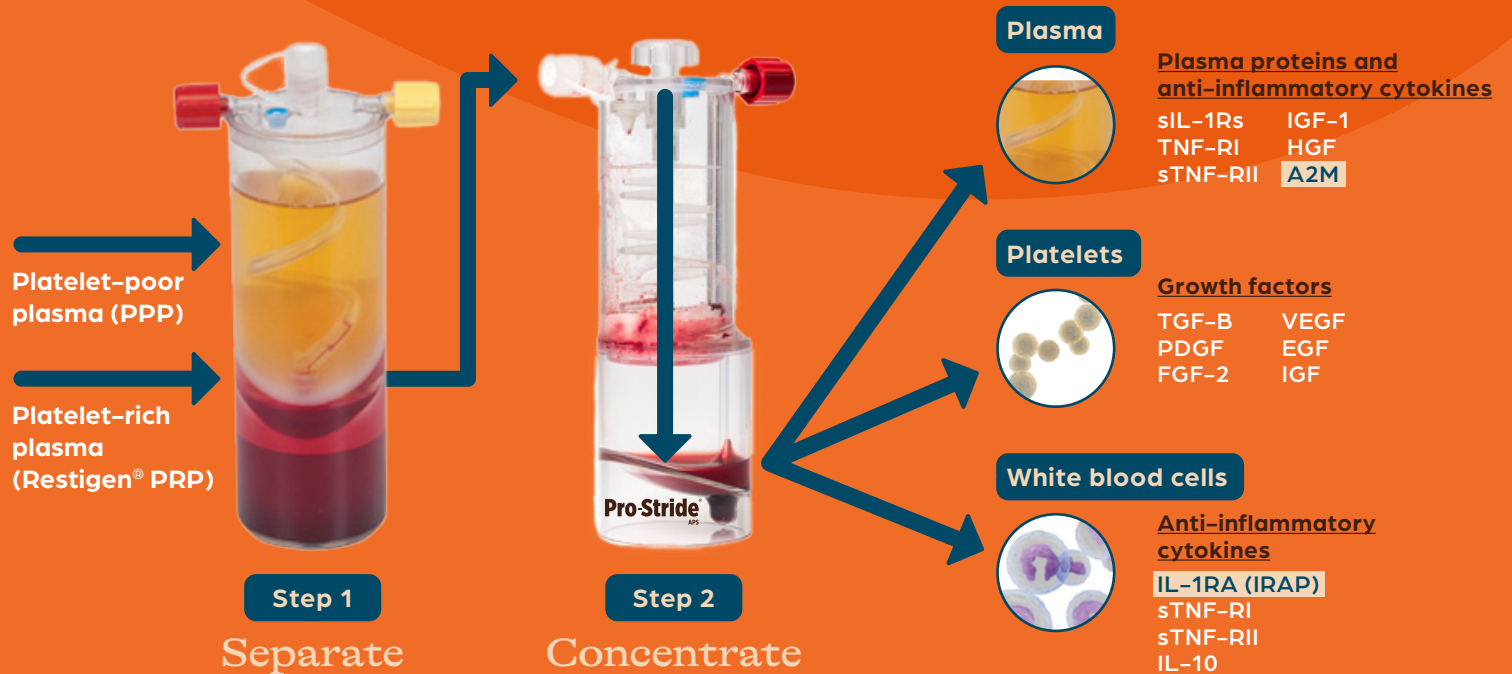
Pro-Stride®
APS



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What is Pro-Stride APS?

A two-step device to separate and concentrate anti-inflammatory cytokines and growth factors from your horse's blood to promote long-term healing and help reduce pain and inflammation caused by osteoarthritis¹.



All three components (plasma, platelets and WBC) are optimal for comprehensive OA management.^{1,2}

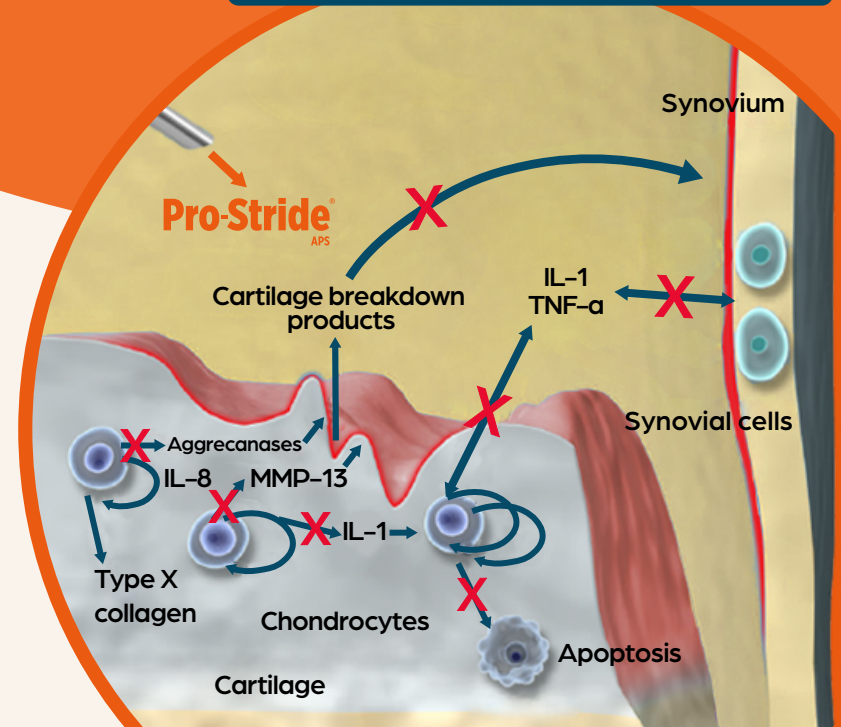
Did you know?

Pro-Stride APS works by helping stop the cycle of inflammation and supporting the healing process

IL-1 and TNFα proteins are responsible for inflammation that leads to joint damage and osteoarthritis.

Pro-Stride blocks these proteins to prevent inflammation and joint damage.

X = Inhibited pathways



Why choose Pro-Stride

SAFE FOR THE HORSE



Relief up to a year depending on the case³



Concentrated, all natural healing, powered by your horse



Safe: no negative immune response with repeat injections



Targets the source of your horse's pain and inflammation³



Little to no downtime after treatment and no withdrawal time for competition



Does not permanently incorporate into the joint capsule or cartilage surface



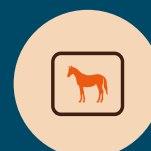
Processed and administered in just 30 minutes



No waiting or second visit required



Portable: administered stall or horse-side



Does not impact advanced imaging interpretation



Only 1 injection needed, not multiple in series

Removing PPP from Step 1.



Scan to discover more about Pro-Stride APS.
ZoetisEquine.com/Lameness

Performance fueled by scientific evidence

Pro-Stride is a leading choice for enhancing equine performance, supported by these study findings that demonstrate its effectiveness and reliability.



Long-lasting performance

Improvements in lameness seen up to a year³



High A2M concentration

Significantly higher A2M in Pro-Stride compared to Alpha2EQ. Pro-Stride platelet poor plasma byproduct is identical to Alpha2EQ and can be used if extra volume is needed⁴



No need to stop NSAID administration

Pro-Stride APS can be collected if your horse is on Bute, Banamine, Equioxx or Ketoprofen without affecting quality of the Pro-Stride final product^{5,6}



Works with PPID horses

The final cell solution of Pro-Stride is not impacted if your horse has PPID⁷



Protection against synovitis

Effective at protecting joints from damage caused by acute inflammation⁸



Full of growth factors

Pro-Stride contains more growth factors than interleukin-1 receptor antagonist protein (IRAP)⁷

Candidates for Pro-Stride APS



Competitive horses with any concern for career longevity, maximizing joint health or drug withdrawal times



Young horses to maximize their athletic career by minimizing the negative impact on cartilage from chronic repetitive steroid use



Pituitary Pars Intermedia Dysfunction (PPID), metabolic or insulin-resistant horses



Any case of acute inflammation (synovitis). No need to use other therapies first.



Older or geriatric horses



Any horse with a history of laminitis



No foreign body response

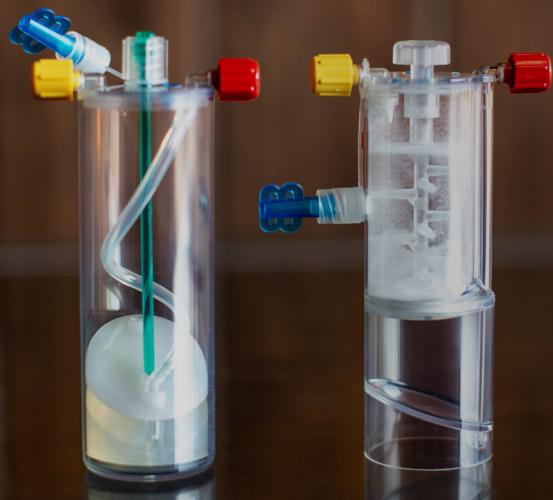
Unlike synthetic materials like polyacrylamide gel, Pro-Stride APS is all-natural, made from your horse's blood and will not cause a foreign body response⁹

Pro-Stride APS is in a league by itself

Category of Regenerative Medicine Device	Device	Processing time	Concern for repeat injections (immune response)	Anti-inflammatory proteins	White blood cells	Platelets	Growth factors
APS: Autologous protein solution	Pro-Stride APS¹⁰	<20 minutes	No	✓ Highly concentrated	✓ Highly concentrated	✓ Highly concentrated	✓ Highly concentrated ⁷
PRP: Platelet-rich plasma	Restigen® PRP¹¹	15 minutes	No	✓	✓	✓	✓
	ProVet® APC¹²	3 minutes	No	✓	✓	✓	✓
	Precise- PRP™¹³	None	Possible due to universal donor pool	✓	✗	✓	✓
PPP: Platelet-poor plasma	Alpha2EQ®¹⁴ A2M	20 minutes	No	✓	✗	✗	Limited, not platelet derived
ACS: Autologous conditioned serum	IRAP^{15*}	24 hours	No	✓	✗	✗	✓
Synthetic polyacrylamide gel	Arthramid-vet®¹⁶	None	Yes**	✗	✗	✗	✗
	Noltrex®¹⁷	None	Yes**	✗	✗	✗	✗
Bovine derived elastin & collagen	Spryng®¹⁸	None	Yes	✗	✗	✗	✗
Amnion based (Do not contain stem cells)	AniCell®¹⁹	None	Yes	✓	✗	✗	✓
	RenoVo®²⁰	None	Yes	✓	✗	✗	✓
	Regenaflex-RT®²¹	None	Yes	✓	✗	✗	✓
	Strydaflex®²¹	None	Yes	✓	✗	✗	✓

* IRAP recommends three dose series of injections

**No long-term data available with repeat injections.



APS is the difference

Pro-Stride Autologous Protein Solution is the only concentrated regenerative therapy that contains highly concentrated plasma, platelets and white blood cells, all of which are essential components for comprehensive healing.

A little APS goes a long way.

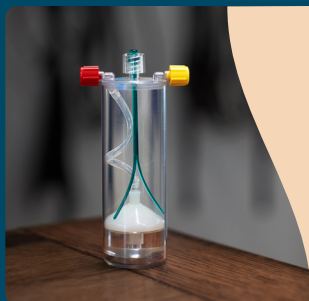
Meet the rest of the Zoetis Regenerative Medicine family

Restigen® PRP and CenTrate® BMA are additional devices that your veterinarian can offer to address issues with tendons, ligaments and bones that cause lameness.



Restigen® PRP

9x concentrated platelet-rich plasma to improve the quality of fiber repair during the healing process for soft tissue injuries²²



CenTrate® BMA

Harnesses regenerative cells from bone marrow to tackle more severe cartilage, bone or tendon/ligament injuries to help improve the healing process



REGENERATIVE MEDICINE DEVICES

Quick and convenient

All devices can be processed in under 30 minutes, stall-side or at the clinic, during the initial appointment.

Proven results

Clinically proven and effective in managing various equine lameness issues.³

A large background image showing a male veterinarian in a grey shirt and dark pants, wearing a stethoscope, leaning over to examine the hoof of a dark-colored horse. The setting appears to be a stable or clinic.

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Continuum of care

Zoetis provides comprehensive support, offering diagnostic tools, solutions and guidance throughout every stage of life.

Always by your side

Zoetis Equine is dedicated to supporting horses and their caregivers, helping to create rewarding relationships built on trust.



Scan to learn more about our Regenerative Medicine Device portfolio.
ZoetisEquine.com/Lameness

Visit **zoetisequine.com** for more information and follow us on social media for updates.



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References

1. Muir et al. The concentration of plasma provides additional bioactive proteins in platelet and autologous protein solutions. *Am J Sports Med.* 2019 Jul;47(8):1955-1963.
2. Zimmer Biomet. nSTRIDE APS scientific narrative, internal document.
3. Bertone AL, Ishihara A, Zekas LJ, et al. Evaluation of a single intra-articular injection of autologous protein solution for treatment of osteoarthritis in horses. *Am J Vet Res.* 2014;75(2):141-151. doi: 10.2460/ajvr.75.2.141.
4. Ortvad KF, Alward L, Cowles B, et al. Use of quantitative mass spectrometry-based proteomics and ELISA to compare the alpha 2 macroglobulin concentration in equine blood-based products processed by three different orthobiologic devices. *Front Vet Sci.* 2024;11. doi: 10.3389/fvets.2024.1335972.
5. Brown KA, Gregorio E, Barot D, et al. Single-dose nonsteroidal anti-inflammatory drugs in horses have no impact on concentrations of cytokines or growth factors in autologous protein solution and platelet-rich plasma. *Am J Vet Res.* 2024;84(4).
6. Brown KA, Gregorio E, Barot D, et al. The effect of prolonged administration of non-steroidal anti-inflammatories on concentrations of cytokines and growth factors in autologous protein solution and platelet rich plasma. Abstract presented at: Proceedings, ACVS Surgery Summit. 2023;7.
7. Moorman VJ, Hart KA, Gordon J, et al. Cytokine profiles of autologous conditioned serum (ACS) and autologous protein solution (APS) from horses with pituitary pars intermedia dysfunction (PPID) and unaffected controls. *VCOT Open.* 2024;7(SO1):1-12. doi: 10.1055/s-0044-1786215.
8. Usimaki A, Ciamillo SA, Barot D, et al. Single injection of intra-articular autologous protein solution in horses with acute interleukin-1B-induced synovitis decreases joint pathology scores. *Equine Vet J.* 2024; 1-11. doi: 10.1111/evj.14203.
9. Lowe J, de Clifford L, Julian A, et al. Histologic and cytologic changes in normal equine joints after injection with 2.5% injectable polyacrylamide hydrogel reveal low-level macrophage-driven foreign body response. *J Am Vet Med Assoc.* 2024;262(5):649-647. doi: 10.2460/javma.23.10.0553.
10. <https://www.zoetisus.com/products/horses/equine-regenerative-medicine/pro-stride-aps>
11. <https://www.zoetisus.com/products/horses/equine-regenerative-medicine/restigen-prp>
12. <https://dechra-us.com/our-products/us/equine/horse/prescription/provet-apc#Centrifuge>
13. <https://www.istobiologics.com/precise>
14. <https://www.astariaglobal.com>
15. <https://dechra-us.com/our-products/us/equine/horse/prescription/orthokine-vet-irap-10>
16. <https://arthramid.com>
17. <https://noltrexvet.com>
18. <https://www.sprynghealth.com>
19. <https://anicellbiotech.com>
20. <https://renovoequine.com>
21. <https://hilltopbio.com>
22. Bosch G, van Schie HTM, de Groot MW, et al. Effects of platelet-rich plasma on the quality of repair of mechanically induced core lesions in equine superficial digital flexor tendons: A placebo-controlled experimental study. *J Orthop Res.* 2010;28(2):211-217.

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