

## irap<sup>®</sup>

irap<sup>®</sup> (interleukin receptor antagonist protein) is a natural anti-inflammatory product that can be used to treat a variety of joint injuries. irap<sup>®</sup> is produced from your horse's own blood and injected into the affected joint to treat inflammation and lameness and to encourage joint healing.



### How does it work?

When a horse's joint becomes injured, the body's normal repair process includes chemical components which can actually accelerate cartilage and joint damage.

These components include a chemical called interleukin-1 (IL-1), which is responsible for causing ongoing inflammation, pain and lameness. By collecting and processing a sample of the horse's blood, irap<sup>®</sup> protein can be produced in 24 hours.

Once prepared, the sterile solution of irap<sup>®</sup>, called autologous conditioned serum (ACS) can then be used to block the action of IL-1 and help alleviate pain and reduce lameness.



**IRAP<sup>®</sup> IS PRODUCED FROM THE HORSE'S OWN BLOOD**



**IRAP<sup>®</sup> INJECTION INTO THE COFFIN JOINT**

### Key points:

- is a product obtained from the patient's own blood;
- is used to treat injuries and degeneration of joints and their supporting structures;
- is a natural anti-inflammatory that the body uses to assist with repair of damaged tissues;
- treatment is a low risk procedure;
- is one of the state-of-the-art biological therapies used in equine orthopaedics.

## What does it involve?

A blood sample is taken from the patient under sterile conditions at your yard or at a clinic. The sample is then incubated for 24 hours, centrifuged (spun rapidly to separate the cells and liquid) and the liquid serum (containing the irap<sup>®</sup>), collected and separated.

The irap<sup>®</sup> solution can be injected into the affected joint(s) or injured area immediately or be stored frozen for further treatments.

Prior to injection into the joint, the area will usually be clipped and will be cleaned and prepared surgically. The horse will often be sedated to ensure accurate needle placement.



PREPARATION FOR STIFLE JOINT INJECTION

## Further treatments

The initial blood sample normally produces enough irap<sup>®</sup> serum to carry out between three and five further treatments. The serum is sealed in individual syringes which can be stored frozen for up to seven months and used to repeat the treatment as necessary. Normally around three treatments are necessary.

## Can I compete my horse under rules during treatment?

There are currently no restrictions on its use in competition, other than it cannot be administered on the day of competition.



## What are the risks?

As with any joint injection, there is a very small risk of joint infection which if not promptly treated can have serious consequences. However, adequate restraint of the horse and careful preparation of the site serve to minimise these risks. No significant side effects of treatment have been reported.

## Will irap<sup>®</sup> help my horse and does it work?

irap<sup>®</sup> has had some very encouraging initial results but like all treatments it will not be successful in all cases. Being a relatively new treatment long term comparative scientific studies on its use are lacking. It can be useful in a number of cases, particularly when more conventional treatments have been unsuccessful or following joint surgery. It is worth noting that irap<sup>®</sup> may not be the most appropriate treatment for all joint conditions.



XLVets Equine is a novel and exciting initiative conceived from within the veterinary profession made up of independently owned, progressive veterinary practices located throughout the United Kingdom, members of XLVets Equine are committed to working together for the benefit of all their clients.  
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