Most joint diseases are characterized by inflammation, pain, functional disability and joint deformity with remodelling of the subchondral bone, and the only non-surgical treatment that modifies the disease is chondroprotective drugs.

**CHONDROPROTECTIVE AGENTS**

<table>
<thead>
<tr>
<th>GLUCOSAMINE SULFATE</th>
<th>CHONDROITIN SULFATE</th>
<th>HYALURONIC ACID</th>
</tr>
</thead>
<tbody>
<tr>
<td>• It is a natural compound of glycosaminoglycan</td>
<td>• It is the major glycosaminoglycan found in the cartilage</td>
<td>• It is one of the main molecular components of joint fluid</td>
</tr>
</tbody>
</table>

**ASSAY REVIEW**

**DOG**
- Dysplasia and osteoarthritis incidence reduction
- Pain relief
- Functional improvement
- Protective effect on joint cartilage

**HUMAN**
- Better quality of life
- Pain relief
- Functional improvement
- Reduce the need for analgesics and surgery delay

**RAT AND RABBIT**
- Cartilage protection
- Factors that promote degradation and inflammation are decreased
- Degenerative process is slowed down

**AIM OF THE INVESTIGATION**

I. Recommending, or not, chondroprotective drugs.
II. Assessing the effectiveness of the treatment with these compounds.
III. Evaluating its safety in the treatment.
IV. Estimating its bioavailability.

**CONCLUSION**

I. The treatment with chondroprotectors is recommended.
II. Current scientific evidence about its effectiveness is still weak and unclear.
III. They are safe drugs even in chronic administrations.
IV. The bioavailability is still controversial.