












## What are the benefits and harms of each treatment option?

Blocks of 100 faces show a “best estimate” of what happens to 100 people who choose different options for one to 6 months. Each face (☺) stands for one person. The shaded areas show the number of people who improve (have less pain) or are harmed. There is no way of knowing in advance if you will be the one who improves or is harmed. About 30 out of 100 people will improve on their own even if they take an inactive or fake treatment. This is called the “placebo effect”.

Group of options	Options	Benefits	Serious Harms and Side Effects
Group 0 These options have the same benefits and harms as a placebo (fake treatment)	<ul style="list-style-type: none"> <li>✓ Chondroitin</li> <li>✓ Hot pepper cream (capsaicin)</li> <li>✓ Glucosamine</li> <li>✓ Electrical treatment applied to the skin (TENS)</li> </ul>	<p>In 100 people:</p> <p><b>30</b> improve on their own</p> <p><b>0</b> improve due to treatment</p> <p><b>70 don't improve</b></p> 	<p>The chance of serious harm is the same for treatment or placebo (fake treatment).</p> <p>Capsaicin can cause discomfort when applied to the skin.</p>
Group 1 These options work a bit better than a placebo and avoid serious harm	<ul style="list-style-type: none"> <li>✓ Exercise</li> <li>✓ Healthy weight</li> <li>✓ Acupuncture</li> <li>✓ Paracetamol</li> </ul> 	<p>In 100 people:</p> <p><b>30</b> improve on their own</p> <p><b>6</b> improve due to treatment</p> <p><b>64 don't improve</b></p> 	<p>The chance of serious harm is the same for treatment or placebo (fake treatment).</p> <p>Exercise can cause people to stop due to pain.</p> <p>Acupuncture can cause bruising.</p>
Group 2 For patients who fail level 1, these options work better than a placebo and avoid serious harm	<ul style="list-style-type: none"> <li>✓ NSAID creams (such as Algesal creamn)</li> <li>✓ Insoles</li> <li>✓ Joint injections with steroid or hyaluronic acid</li> </ul> 	<p>In 100 people:</p> <p><b>30</b> improve on their own</p> <p><b>21</b> improve due to treatment</p> <p><b>49 don't improve</b></p> 	<p>The chance of serious harm is the same for treatment or placebo (fake treatment).</p> <p>NSAID creams can cause dry skin or rash.</p> <p>A common side effect from joint injection is a skin reaction at the joint site</p>
Group 3 These options work better than a placebo. More people are harmed by the treatment than in level 2.	<ul style="list-style-type: none"> <li>✓ NSAID pills (such as ibuprofen or naproxen)</li> </ul> 	<p>In 100 people:</p> <p><b>30</b> improve on their own</p> <p><b>21</b> improve due to treatment</p> <p><b>49 don't improve</b></p> 	<p><b>NSAID pills can cause nausea, stomach bleeding or ulcers, or heart attack. In 100 people under 60 years with no history of a heart disease:</b></p> <p><b>99 are not harmed</b></p> <p><b>1 gets a heart attack due to NSAID pills</b></p>  <p>Number of heart attacks increase in older people or those with previous heart attacks</p>
Group 4 These options work better than a placebo. More people are harmed by the treatment than level 3.	<ul style="list-style-type: none"> <li>✓ Opioid (narcotic) painkillers such as opioids, oxycontin, oxycodone, morphine, tramadol</li> </ul> 	<p>In 100 people:</p> <p><b>30</b> improve on their own</p> <p><b>21</b> improve due to treatment</p> <p><b>49 don't improve</b></p> 	<p><b>Opioid painkillers can cause nausea, constipation, or withdrawal symptoms. 23 more people get withdrawal symptoms when their Opioid painkillers are reduced</b></p> <p><b>77 people avoid withdrawal symptoms</b></p> 
Group 5	Surgery	See a surgeon about joint replacement surgery if other options have not worked.	