



# Class II Division 2 Summary

<b>Definition</b>	<p>By incisor relationship:</p> <ul style="list-style-type: none"> <li>Lower central incisor edges lie palatal to the cingulum of the upper central incisor (Class II)</li> <li>Upper central incisors (and usually lowers) are retroclined with minimal OJ although maybe ↑ (Division 2)</li> </ul> <div style="display: flex; justify-content: space-around; align-items: center;">   </div>
<b>Prevalence</b>	3% of population
<b>Aetiology</b>	<ul style="list-style-type: none"> <li>'strap-like' lower lip may retrocline maxillary and mandibular</li> <li>High resting lip pressure against maxillary central incisors</li> </ul>
<b>Characteristics</b>	<p><b>Skeletal</b></p> <ul style="list-style-type: none"> <li>Usually skeletal 2 base but can be skeletal 1 or 3</li> <li>↑ cranial base angle → mandible retrognathic</li> <li>Longer cranial base → prognathic maxilla</li> <li>Maxilla short, broad and forward relative to mandible → tendency for scissors bite</li> <li>↓ lower anterior face height</li> <li>↓ MMPA</li> </ul> <p><b>Dental</b></p> <ul style="list-style-type: none"> <li>Retroclined upper and lower incisors (bimaxillary retroclination)</li> <li>↑ interincisal angle</li> <li>OJ usually ↓</li> <li>OB usually deep</li> <li>Extruded upper incisors</li> <li>Buccal segments usually Class II</li> <li>Scissors bite common in premolar region</li> <li>Crown-root angle may be ↓</li> </ul> <p><b>Soft tissues</b></p> <ul style="list-style-type: none"> <li>High resting lower lip line (due to ↓ lower anterior face height)</li> <li>Deep labio-mental fold</li> <li>High masseteric muscle forces</li> </ul> <p><b>Facial growth</b></p> <ul style="list-style-type: none"> <li>Usually favourable</li> </ul>
<b>Treatment</b>	
<b>Treatment aims</b>	<ul style="list-style-type: none"> <li>Relieve crowding</li> <li>↓ OB</li> <li>Correct buccal segment relationships</li> </ul>
<b>Treatment options</b>	<p><b>Interceptive</b></p> <ul style="list-style-type: none"> <li>Modified functional appliances in growing patients</li> <li>Use springs behind upper incisors to procline the maxillary incisors and correct the sagittal relationship with same appliance</li> </ul> <p><b>Comprehensive orthodontics</b></p>

	<ul style="list-style-type: none"> <li>• If bodily tooth movement is required; need to torque in upper incisors</li> <li>• If skeletal problem allows camouflage</li> <li>• Consider extraction decision in low MMPA cases as space closure can be difficult</li> </ul> <p><b>Orthognathic surgery (+ orthodontic decompensation)</b></p> <ul style="list-style-type: none"> <li>• When skeletal discrepancy is too severe for camouflage, ANB &gt; 9°</li> <li>• Non-growing patients</li> </ul>
<b>Characteristics favouring orthodontics only</b>	<ul style="list-style-type: none"> <li>• Small ANB difference (mild skeletal discrepancy)</li> <li>• Growing patient</li> </ul>
<b>Timing of treatment</b>	<p>Patient should be seen for treatment at:</p> <ul style="list-style-type: none"> <li>• Mixed dentition – prevention of deep OB can be achieved with URA</li> <li>• Permanent dentition</li> </ul>
<b>Stability and retention</b>	<ul style="list-style-type: none"> <li>• Consider proclining the lower labial segment as it has been trapped</li> <li>• Proclination of lower labial segment after intrusion of upper labial segment has been suggested as stable treatment</li> </ul>
<b>Suggested reading</b>	