



# Class II Division 1 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 are proclined or average inclination, with ↑ OJ (Division 1)</li> </ul> <div style="display: flex; justify-content: space-around; align-items: center;">   </div>
<b>Prevalence</b>	20% of population
<b>Aetiology</b>	<ul style="list-style-type: none"> <li>• Skeletal base relationship usually Class II</li> <li>• Habits, e.g. digit sucking</li> <li>• Soft tissues, e.g. lower lip trap behind upper incisors, short upper lip</li> </ul>
<b>Characteristics</b>	<p><b>Skeletal</b></p> <ul style="list-style-type: none"> <li>• 76% skeletal 2 base; if skeletal 1, incisor relationship is usually due to a habit</li> <li>• ↑ cranial base angle → mandible retrognathic</li> <li>• Longer cranial base → prognathic maxilla</li> <li>• May have small mandible and large maxilla</li> </ul> <p><b>Dental</b></p> <ul style="list-style-type: none"> <li>• Class II incisor relationship with proclined or average upper incisors</li> <li>• OJ ↑</li> <li>• OB often deep and incomplete</li> <li>• Buccal segments usually Class II; may have crossbites</li> </ul> <p><b>Soft tissues</b></p> <ul style="list-style-type: none"> <li>• Lip pattern important in maintaining stable result → short upper lip results in OJ ↓ being less stable</li> <li>• Lower lip may have caused malocclusion, e.g. trapping behind upper incisors or lip-tongue seal</li> </ul> <p><b>Mandibular position</b></p> <ul style="list-style-type: none"> <li>• Ensure patient is not habitually posturing; treat to centric relation</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>• ↓ OJ</li> <li>• Correct buccal segment relationships</li> </ul>
<b>Treatment options</b>	<p><b>Interceptive</b></p> <ul style="list-style-type: none"> <li>• Functional appliances in growing patients</li> </ul> <p><b>Comprehensive orthodontics</b></p> <ul style="list-style-type: none"> <li>• If bodily tooth movement is required</li> <li>• If skeletal problem allows camouflage</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</li> </ul>

	<ul style="list-style-type: none"> <li>• In non-growing patients</li> </ul>
<b>Aims for orthodontics only</b>	<ul style="list-style-type: none"> <li>• Dental camouflage</li> <li>• Some mandibular growth</li> <li>• Some maxillary growth inhibition</li> <li>• Combination of above</li> </ul>
<b>Characteristics favouring orthodontics only</b>	<ul style="list-style-type: none"> <li>• Small ANB difference (mild skeletal discrepancy)</li> <li>• No dentoalveolar compensation</li> <li>• Growing patient</li> <li>• No habit</li> <li>• OJ is more due to proclination of upper labial segment</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 to start growth modification 1 to 3 years before the peak adolescent growth spurt</li> <li>• Permanent dentition</li> </ul>
<b>Suggested reading</b>	