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## Position paper

# Clinical application of removable partial dentures using thermoplastic resin. Part II: Material properties and clinical features of non-metal clasp dentures



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## ABSTRACT

This position paper reviews physical and mechanical properties of thermoplastic resin used for non-metal clasp dentures, and describes feature of each thermoplastic resin in clinical application of non-metal clasp dentures and complications based on clinical experience of expert panels. Since products of thermoplastic resin have great variability in physical and mechanical properties, clinicians should utilize them with careful consideration of the specific properties of each product. In general, thermoplastic resin has lower color-stability and higher risk for fracture than polymethyl methacrylate. Additionally, the surface of thermoplastic resin becomes roughened more easily than polymethyl methacrylate. Studies related to material properties of thermoplastic resin, treatment efficacy and follow-up are insufficient to provide definitive conclusions at this time. Therefore, this position paper should be revised based on future studies and a clinical guideline should be provided.

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## Contents

1. Introduction . . . . .	73
2. Mechanical properties of thermoplastic resins used for NMCDs . . . . .	73
2.1. Polyamides . . . . .	73
2.2. Polyesters . . . . .	73
2.3. Polycarbonates . . . . .	74
2.4. Acrylic resin . . . . .	76
2.5. Polypropylenes . . . . .	76
3. Characteristics of thermoplastic resins used for NMCDs . . . . .	76
3.1. Polyamides . . . . .	76
3.1.1. Valplast <sup>®</sup> . . . . .	76
3.1.2. Lucitone FRS <sup>®</sup> . . . . .	77
3.1.3. Ultimate <sup>®</sup> . . . . .	77
3.2. Polyesters (EstheShot <sup>®</sup> , EstheShot Bright <sup>®</sup> ) . . . . .	77
3.3. Polycarbonates . . . . .	79
3.3.1. Reigning Resin <sup>®</sup> . . . . .	79
3.3.2. Reigning N <sup>®</sup> . . . . .	79
4. Maintenance of NMCDs . . . . .	80
5. Complications of NMCDs . . . . .	81
5.1. Problems at the time of (or immediately after) insertion . . . . .	81
5.2. Complications some time post-insertion . . . . .	81
6. Limitations of this Position Paper and future prospects . . . . .	82
Acknowledgements . . . . .	84
References . . . . .	84

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