

Newcastle-Ottawa Scale (Case-Control Version)

1. Khaddour et al. (2024) – Journal: Bioengineering

Title: Healing of Extraction Sites after Alveolar Ridge Preservation Using Advanced Platelet-Rich Fibrin

NOS Assessment (Case-Control Version):

Selection (4/4):

- ★ Adequate case definition – clear use of A-PRF and surgical notes
- ★ Representativeness of the cases – selected from a single academic clinic
- ★ Selection of controls – natural healing patients from same setting
- ★ Definition of controls – clear, no ARP applied

Comparability (1/2):

- ★ Minimal matching and no multivariate adjustment; some demographic control only.

Exposure (3/3):

- ★ Exposure ascertainment through surgical records and CBCT
- ★ Same exposure method used for both groups
- ★ Record-based study, non-response not applicable

Total Score: 8/9

2. Levi et al. (2017) – Journal: Clinical Implant Dentistry and Related Research

Title: Dimensional Changes of the Maxillary Sinus Following Tooth Extraction With and Without Socket Preservation

NOS Assessment (Case-Control Version):

Selection (3/4):

- ★ no information on the type/state of the socket (e.g., presence of all walls).
- ★ Radiographically based selection from hospital records
- ★ Controls from same patient database
- ★ Clear definitions and exclusions

Comparability (2/2):

- ★ Multivariate statistical analysis performed
- ★ Appropriate adjustment for variables (age, location, etc.)

Exposure (3/3):

- ★ Panoramic radiographs with matched superimposition
- ★ Consistent exposure measurement methods
- ★ Record-based study, non-response not applicable

Total Score: 8/9

3. Dai et al. (2025) – Journal: Journal of Periodontology

Title: Effect of Alveolar Ridge Preservation at Periodontally Compromised Molar Extraction Sockets

NOS Assessment (Case-Control Version):

Selection (4/4):

- ★ Clearly defined ARP and NH groups with strict inclusion/exclusion criteria
- ★ Representative patients from a major hospital
- ★ Controls selected from same pool
- ★ Comprehensive case/control definitions

Comparability (2/2):

- ★ Statistical adjustment using regression modeling
- ★ Controlled for multiple confounders including age, jaw, and buccal wall thickness

Exposure (3/3):

- ★ Standardized CBCT measurement protocol
- ★ High intra-examiner reliability (ICC = 0.946)
- ★ All data from digital records, no drop-outs

Total Score: 9/9