

Question

State of the Science Implant Dentistry

What is the effect on outcomes of time-to-loading of a fixed or removable prosthesis placed on implant(s)?

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Data Collected

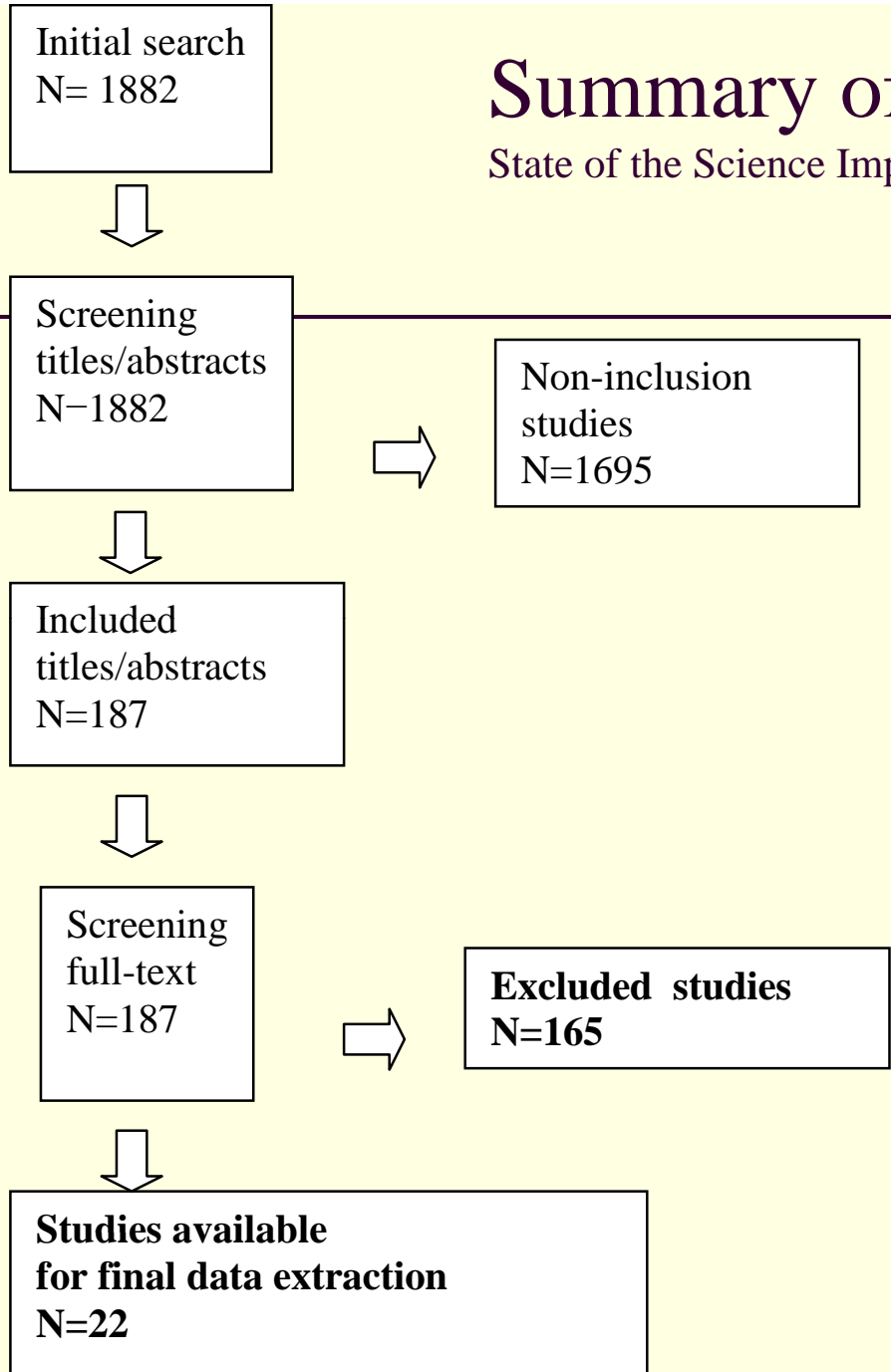
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- Criteria for non-inclusion of papers
- Any attempt of comparative analysis with regard to time-to-loading

- Criteria for non-inclusion of papers
- Anecdotal reporting of results
- Cross-sectional & case-control study & «failing implants studies»
- Report limited to description of techniques for provisional fabrication
- Observation period less than 1 year
- Journal is produced by manufacturer
- Less than 5 patients
- Abstract only
- Old Technology (i.e. pre 1985)
- Posthoc analyses of previous reports
- Single technique case series without any element of comparisons

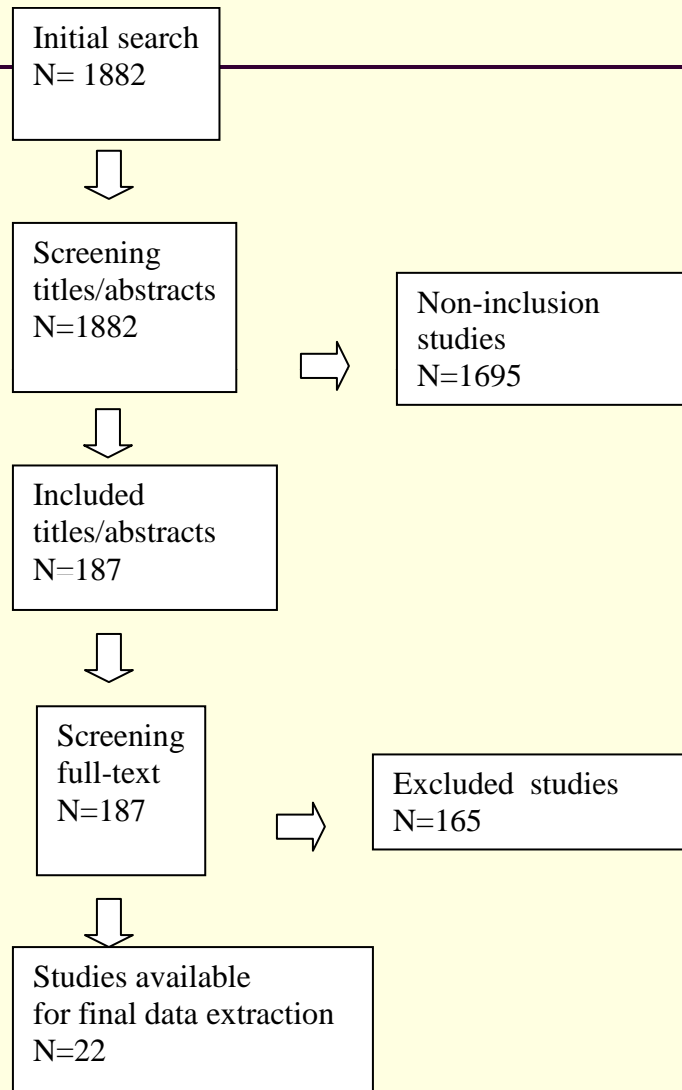
Summary of Papers Used /Available

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Summary of Papers Used /Available

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A. Reasons for excluding studies (N=165)*

Absence of comparative control group	112
Anecdotal and ambiguous reported	35
Less than 5 patients	18
Old technology reported	13
Less than 1 year observation period	11
•some studies excluded for multiple reasons	

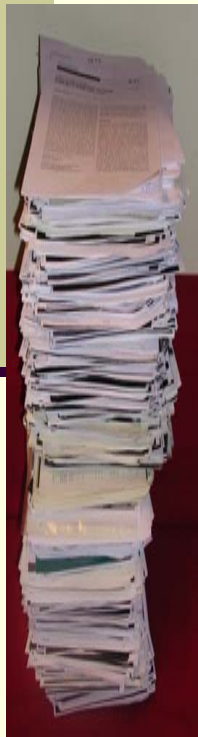
B. Methodology of studies included (N=22)

RCT Randomized controlled trial	6
RCT Randomized controlled trial-split mouth	1
Prospective study w/ concurrent controls	7
Prospective study w/ concur submerged implants	6
Retrospective study w/ concurrent controls	2

How Did You Select Paper Inclusion/Exclusion Criteria?

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- Review authors used forced decision for inclusion & exclusion



excluded studies - Microsoft Word

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Final Showing Markup Show

Characteristics of excluded papers (n=165)

Authors Title Source	Study aim (sic)	Exclusion reason
1. Aalam AA , Nowzari H , Krivitsky A Functional Restoration of Implants on the Day of Surgical Placement in the Fully Edentulous Mandible: A Case Series <i>Clin Implant Dent Relat Res</i> 2005; 7: 10-16	Report the clinical experience and outcome of a study of the functional rehabilitation of 16 completely edentulous mandibles with immediately loaded cross- arch screw-retained hybrid prostheses at the University of Southern California.	Single technique case series
2. Abboud M , Koeck B , Stark H , Wahl G , Paillon R Immediate loading of single- tooth implants in the posterior region <i>Int J Oral Maxillofac Implants</i> 2005; 20: 61- 68	Evaluate the clinical response and safety of immediately loaded single-tooth implants placed in the posterior region of the maxilla and mandible	Single technique case series
3. Ahn MR , An KM , Choi JH , Sohn DS Immediate loading with mini dental implants in the fully edentulous mandible <i>Implant Dent</i> 2004; 13: 367-	Evaluate the efficacy of 27 provisional dental implants	Insufficient observation period (< 1 year) & Single technique case series

Page 1 Sec 1 1/20 At 2,6cm Ln 1 Col 1 REC TRK EXT OVR English (U.S)

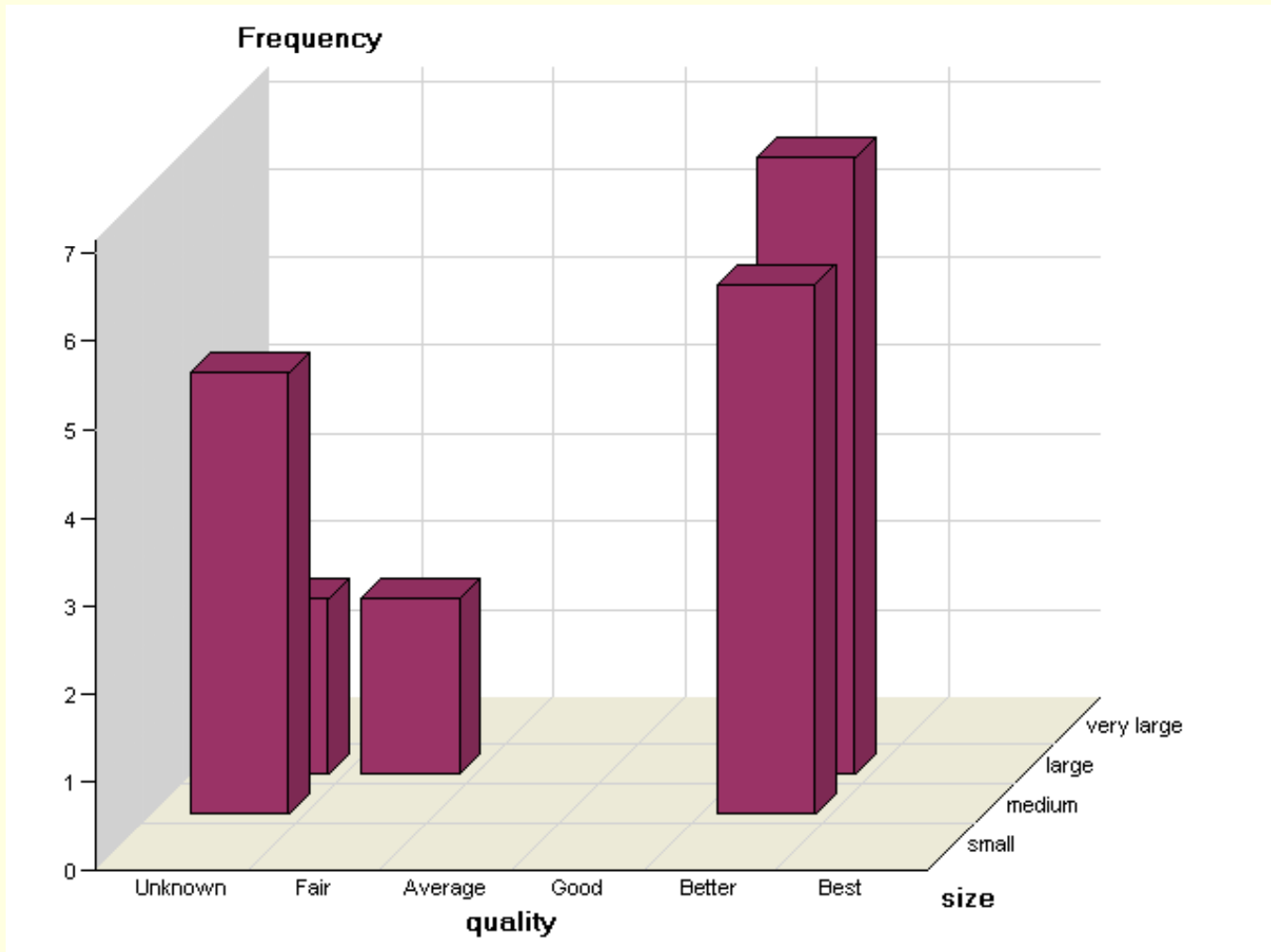
start Academy of Osseoint... Microsoft PowerPoint ... Outcomes described ... excluded studies - Mi...

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Findings (n= 22)

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Size and quality of papers



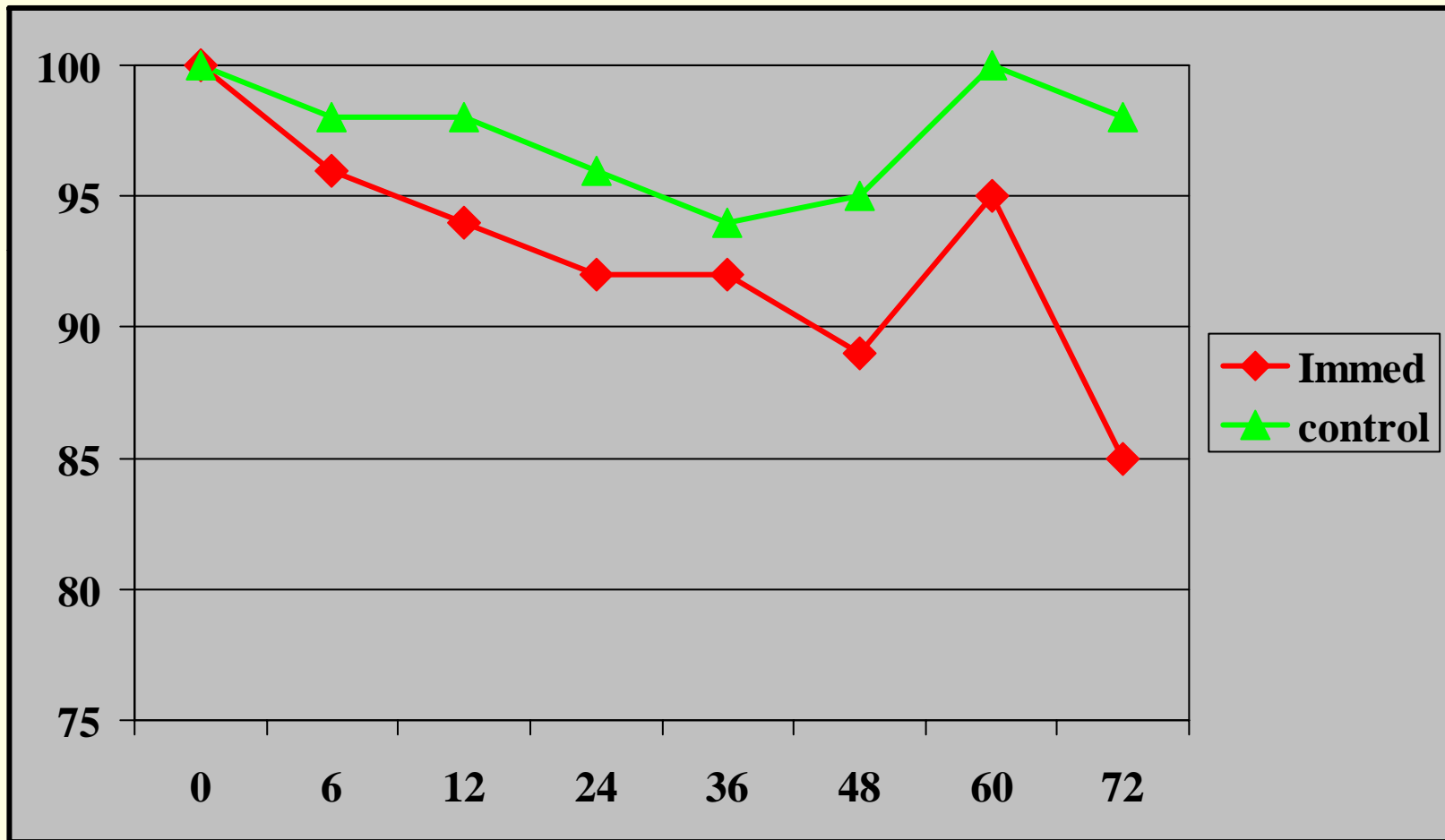
Proportion estimates

"Life"

Immediate: 94% (CI 91-97)

Control: 97% (CI 95-99)

Z=0.7, p=.50



Summary of Quality of studies (n=22)

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Variables which describe the study as a whole (and the publication)

Variables which describe each treatment employed in the study

Outcomes for each treatment employed in the study

**Great heterogeneity amongst the studies regarding independent and dependent variables
→ interpretation of data?**



Other Findings (n= 22)

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Treatment outcomes described in papers on immediate loading (n=22)

Failure, according to criteria described by 1986 Albrektsson et al*; 6 papers

- Chiapasco et al
- Ibanez et al
- Romeo et al
- Røynesdal et al
- Testori et al (2003a)
- Testori et al (2003b)

Failure, according to criteria described by 1990 Albrektsson & Sennerby*, 1 paper

- Schnitman et al (1990)

Failure, according to criteria described by 1994 Albrektsson & Isidor*, 1 paper

- De Bruyn et al

Failure, according to criteria described by 1997 Buser-et al & 2002 Cochran et al*, 2 papers

