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## **Optimizing care in lumbar radiculopathy and neurogenic claudication: from injection to inference, and from clinician to algorithm**

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# **Stellingen behorende bij het proefschrift getiteld “Optimizing Care in Lumbar Radiculopathy and Neurogenic Claudication. From injection to inference, and from clinician to algorithm”**

- 1.** Transforaminal epidural steroid injections can be beneficial in patients with lumbar radiculopathy; however, even placebo injections can be beneficial in some patients – this thesis.
- 2.** Patient selection for transforaminal epidural steroid injections remains challenging due to the absence of unequivocally predictive factors – this thesis.
- 3.** Type II Modic changes, which are associated with a chronic inflammatory environment, are not correlated with the treatment effect of a transforaminal epidural steroid injection in patients with lumbar disc herniation – this thesis.
- 4.** There is both room and a clear need to optimize pain treatment strategies, especially in the acute phase of lumbar radiculopathy – this thesis.
- 5.** Automized grading of lumbar spinal stenosis has the potential to improve patient care but clear standards for the development and validation of such algorithms are essential – this thesis.
- 6.** Sometimes, prioritizing feasibility over a perfectly designed study is justified.
- 7.** AI will not replace doctors, but doctors who know when to use AI will replace doctors who don't.
- 8.** The cumulative workload placed on doctors over the years leaves insufficient time for the development of innovative solutions.
- 9.** “In theory, there is no difference between theory and practice. But, in practice, there is.” (Yogi Berra, 1925-2015) – the average treatment effects from studies do not always reflect the heterogeneity of individual patient responses observed in clinical practice.
- 10.** “Everything should be made as simple as possible, but not simpler.” (Albert Einstein, 1879-1955) - radiological grading systems must balance reliability and clinical applicability, as both oversimplification and excessive complexity limit their usefulness.
- 11.** “Every champion was a contender that refused to give up.” (Rocky Balboa) – the development of clinically meaningful innovations requires sustained effort and perseverance.