Summary of Findings – Radiofrequente laesie

Population: Patients with facet-related low back pain after conservative treatment of at least 3 months, which has been diagnosed with a test block of the medial branch of the dorsal ramus of the segmental nerves L3/S1 (subgroup: 50% vs 80% pain reduction after a test block and pain score from 5 VAS)
Intervention: Radiofrequency lesion (RF) with or without conventional treatment with physiotherapy and/or medication (possible combination with TENS)
Comparator: Continuation of conventional treatment with physiotherapy and/or medication (possibly in combination with TENS) or placebo/sham procedure alone

Outcome Timeframe	**Study results and measurements**	**Absolute effect estimates**		**Certainty of the evidence** (Quality of evidence)	**Summary**
		Continuation of conventional treatment or placebo alone	RF with or without conventional treatment		
Pain intensity at 3 months	Measured by two scales: 1. NRS (Juch 2017) Scale: 0 - 10 Lower better 2. VAS (Van Wijk 2005) Scale: Scale: 0 - 10 Lower better Based on data from 332 participants in 2 studies Follow up 3 months	Juch (2017): MD of -0.43 (95%CI -1.01 to 0.15) in favor of RF. Van Wijk (2005): mean change RF group was -2.1 versus -1.6 in the control group. The MD was 0.5 in favor of RF. No 95%CI reported.		**Low** Due to very serious risk of bias[1]	RF with or without conventional treatment may result in little to no difference in pain intensity at 3 months when compared with continuation of conventional treatment with physiotherapy and/or medication or placebo/sham procedure alone in patients with facet-related low back pain after conservative treatment of at least 3 months.
Pain intensity at 6 months	Measured by: Numeric Rating Scale Scale: 0 - 10 Lower better Based on data from 251 participants in 1 study Follow up 6 months	**4.8** Mean	**4.6** Mean Difference: **MD 0.23 lower** (CI 95% 0.97 lower - 0.51 higher)	**Low** Due to very serious risk of bias[1]	RF with or without conventional treatment may result in little to no difference in pain intensity at 6 months when compared with continuation of conventional treatment with physiotherapy and/or medication or placebo/sham procedure alone in patients with facet-related low back pain after conservative treatment of at least 3 months.

Pain intensity at 12 months	Measured by: Numeric Rating Scale Scale: 0 - 10 Lower better Based on data from 251 participants in 1 study Follow up 12 months	**4.4** Mean **4.5** Mean Difference: **MD 0.05 higher** (CI 95% 0.64 lower - 0.74 higher)	**Low** Due to very serious risk of bias[1]	RF with or without conventional treatment may result in little to no difference in pain intensity at 12 months when compared with continuation of conventional treatment with physiotherapy and/or medication or placebo/sham procedure alone in patients with facet-related low back pain after conservative treatment of at least 3 months.
Functioning status at 3 months	Measured by: Oswestry Disability Index Scale: 0 - 100 Lower better Based on data from 251 participants in 1 study Follow up 3 months	**28.7** Mean **26.0** Mean Difference: **MD -2.64 lower** (CI 95% -6.59 lower - 1.31 higher)	**Low** Due to very serious risk of bias[1]	RF with or without conventional treatment may result in little to no difference in functioning status at 3 months when compared with continuation of conventional treatment with physiotherapy and/or medication or placebo/sham procedure alone in patients with facet-related low back pain after conservative treatment of at least 3 months.
Functioning status at 6 months	Measured by: Oswestry Disability Index Scale: 0 - 100 Lower better Based on data from 251 participants in 1 study Follow up 6 months	**27.2** Mean **25.4** Mean Difference: **MD -1.77 lower** (CI 95% -5.98 lower - -2.44 lower)	**Low** Due to very serious risk of bias[1]	RF with or without conventional treatment may result in little to no difference in functioning status at 6 months when compared with continuation of conventional treatment with physiotherapy and/or medication or placebo/sham procedure alone in patients with facet-related low back pain after conservative treatment of at least 3 months.
Functioning status at 12 months	Measured by: Oswestry Disability Index Scale: 0 - 100 Lower better Based on data from 251 participants in 1 study Follow up 12 months	**25.0** Mean **24.6** Mean Difference: **MD -0.45 lower** (CI 95% -4.98 lower - 4.08 higher)	**Low** Due to very serious risk of bias[1]	RF with or without conventional treatment may result in little to no difference in functioning status at 12 months when compared with continuation of conventional treatment with physiotherapy and/or medication or placebo/sham procedure alone in patients with facet-related low back pain after conservative treatment of at least 3 months.

Quality of life at 3 months	Based on data from 332 participants in 2 studies Follow up 3 months	Juch (2017), EQ5D score: MD -0.01 (95%CI -0.07 to 0.05) in favor of the control group. Juch (2017), RAND-36 physical health score: MD 3.88 (95%CI -1.55 to 9.31) in favor of RF. Juch (2017), RAND-36 mental health score: MD -0.54 (95%CI -4.81 to 3.73) in favor of the control group. Van Wijk (2005) reported multiple domains of the SF-36 questionnaire. Results are depicted in a table in the results section.	**Very low** Due to very serious risk of bias, Due to serious imprecision[2]	The evidence is very uncertain about the effect of RF with or without conventional treatment on quality of life at 3 months when compared with continuation of conventional treatment with physiotherapy and/or medication or placebo/sham procedure alone in patients with facet-related low back
Quality of life at 6 months	Based on data from 251 participants in 1 study Follow up 6 months	Juch (2017), EQ5D score: MD -0.02 (95%CI -0.03 to 0.07) in favor of RF. Juch (2017), RAND-36 physical health score: MD 0.83 (95%CI -4.59 to 6.25) in favor of RF. Juch (2017), RAND-36 mental health score: MD -0.10 (95%CI -4.36 to 4.16) in favor of the control group.	**Very low** Due to very serious risk of bias, Due to serious imprecision[2]	The evidence is very uncertain about the effect of RF with or without conventional treatment on quality of life at 6 months when compared with continuation of conventional treatment with physiotherapy and/or medication or placebo/sham procedure alone in patients with facet-related low back
Quality of life at 12 months	Based on data from 251 participants in 1 study Follow up 12 months	Juch (2017), EQ5D score: MD -0.00 (95%CI -0.06 to 0.06). Juch (2017), RAND-36 physical health score: MD -1.57 (95%CI -7.53 to 4.39) in favor of the control group. Juch (2017), RAND-36 mental health score: MD 1.14 (95%CI -3.19 to 5.47) in favor of RF.	**Very low** Due to very serious risk of bias, Due to serious imprecision[2]	The evidence is very uncertain about the effect of RF with or without conventional treatment on quality of life at 12 months when compared with continuation of conventional treatment with physiotherapy and/or medication or placebo/sham procedure alone in patients with facet-related low back

Complications	Based on data from 79 participants in 1 study	Juch (2017) reported no treatment-related adverse events during the 12-month follow-up. Van Wijk (2005): treatment-related pain RD 0.23 (95% CI 0.02 to 0.44) in favor of sham group. Van Wijk (2005): change of sensibility RD 0.03 (95% CI -0.06 to 0.11) in favor of sham group. Van Wijk (2005): loss of motor function RD 0.00 (95% CI -0.09 to 0.10).	**Very low** Due to serious inconsistency, Due to serious imprecision, Due to very serious risk of bias[3]	The evidence is very uncertain about the effect of RF with or without conventional treatment on complications when compared with continuation of conventional treatment with physiotherapy and/or medication or placebo/sham procedure alone in patients with facet-related low back pain after conservative treatment of at least 3 months.

[1.] **Risk of Bias: serious.** Inadequate/lack of blinding of participants and personnel, resulting in potential for performance bias, potential selection bias and a high cross-over rate in the intervention group, resulting in possible underestimation of the treatment effect.
[2.] **Risk of Bias: serious.** Inadequate/lack of blinding of participants and personnel, resulting in potential for performance bias, potential selection bias and a high cross-over rate in the intervention group, resulting in possible underestimation of the treatment effect; **Imprecision: serious.** Wide confidence intervals.
[3.] **Risk of Bias: serious.** Inadequate/lack of blinding of participants and personnel, resulting in potential for performance bias, potential selection bias and a high cross-over rate in the intervention group, resulting in possible underestimation of the treatment effect; **Inconsistency: serious.** The direction of the effect is not consistent between the included studies; **Imprecision: serious.** Wide confidence intervals.