OBJECTIVES: Osteoarthritis (OA) is the most common and costly bone and joint disease, and the Psoriatic Arthritis Response Criteria, Health Assessment Questionnaire and Boolean scores are frequently used in clinical trials via a Bayesian network meta-analysis. Following a payer perspective, direct costs relating to drug acquisition, administration, monitoring and overall patient management were considered (2015). RESULTS: All anti-TNF therapies yielded the most costs compared to existing treatments in the aforementioned efficacy outcomes and in terms of quality-adjusted life years (QALYs) compared to SoC. The incremental cost per QALY gained of CZP relative to SoC was €15,339 and €20,714 at 12- and 24-week response assessment period. Similarly, at the alternative willingness-to-pay threshold of €34,000, between the anti-TNFs, efficacy differences did not reach statistical significance. In terms of the mean lifetime patient cost, it ranged from €1,469 for CZP to €6,632 for infliximab, assuming a 12-week response assessment period. The total treatment fees of these five regimens within the observational period, SCS + CMM treatment reduces significantly pain intensity and demonstrates the potential savings associated with introduction of Hylan. OA of the knee, illustrate 5-weeks current costs of treating patients with the condition, and demonstrate the potential savings associated with introduction of Hylan. A Markov microsimulation model was developed to define a treatment pathway for OA of the knee, which is cost-effective relative to most other licensed anti-TNF agents in Greece. If this loss is compensated with large cost saving, we might still consider the intervention cost-effective. The objective of this economic evaluation was to assess cost-effectiveness of telerehabilitation versus SR. METHODS: A Markov model was employed to simulate the natural progression of knee OA, assuming telerehabilitation does not change this. The revision risk was calculated from patient-level (multicentre KAT trial) employing a parametric model including established prognostic factors. The others state transition probabilities and treatment effects were obtained from a number of relevant literature. Rehabilitation and transportation costs were assessed adopting Ita-NHS perspective employing Italian tariffs. The patients without complications followed the TR-SR programme receiving half of the sessions in SR and half in telerehabilitation (67.5%); Patients with at least one complication following face-to-face sessions. Results were adjusted applying an annual discount rate of 3% and half-cycle correction. Probabilistic sensitivity analysis (PSA) described the parameters uncertainty. RESULTS: A cohort of 1000 patients with the features of KAT trial population (70 years old, 44% male and 19% had any complication related to the surgery) were first assigned to SR then to TR-SR. The mean (SE) lifetime healthcare cost in SR arm was €1,033.81 (€21.97) and €818.44 (€13.82) for telerehabilitation (mean±SD difference -215.33±50.64). The probability that telerehabilitation is cost-saving (WTP=0) is 92%. CONCLUSIONS: Adopting the healthcare provider perspective, TR-SR seems to be cost-effective when compared to a SR programme. Further sensitivity analyses are required to relax the model assumptions and to assess the robustness of the model.

PMS75 TELEREHABILITATION AFTER TOTAL KNEE REPLACEMENT: PRELIMINARY COST-EFFECTIVENESS ANALYSIS OF AN INNOVATIVE DEVICE Fusco F1, Turchetti G2
1Scauola Superiore Sant’Anna, Pisa, Italy, 2Scauola Superiore Sant’Anna, Pisa, Italy

OBJECTIVES: A telerehabilitation service following Total Knee Replacement (TKR) has been shown to be not inferior to standard rehabilitation (SR) in recovering the active knee flexion range of motion (ROM) in patients who had no complications related to the surgery. However, little is known about its cost-effectiveness. The objective of this economic evaluation was to assess cost-effectiveness of telerehabilitation versus SR. METHODS: A Markov model was employed to simulate the natural progression of TKR patients with and without complications, assuming telerehabilitation does not change this scenario. The revision risk was calculated from patient-level (multicentre KAT trial) employing a parametric model including established prognostic factors. The others state transition probabilities and treatment effects were obtained from a number of relevant literature. Rehabilitation and transportation costs were assessed adopting Ita-NHS perspective employing Italian tariffs. The patients without complications followed the TR-SR programme receiving half of the sessions in SR and half in telerehabilitation (67.5%). Patients with at least one complication following face-to-face sessions. Results were adjusted applying an annual discount rate of 3% and half-cycle correction. Probabilistic sensitivity analysis (PSA) described the parameters uncertainty. RESULTS: A cohort of 1000 patients with the features of KAT trial population (70 years old, 44% male and 19% had any complication related to the surgery) were first assigned to SR then to TR-SR. The mean (SE) lifetime healthcare cost in SR arm was €1,033.81 (€21.97) and €818.44 (€13.82) for telerehabilitation (mean±SD difference -215.33±50.64). The probability that telerehabilitation is cost-saving (WTP=0) is 92%. CONCLUSIONS: Adopting the healthcare provider perspective, TR-SR seems to be cost-effective when compared to a SR programme. Further sensitivity analyses are required to relax the model assumptions and to assess the robustness of the model.

PMS76 ECONOMIC EVALUATION OF TOCILIZUMAB COMBINATION IN THE TREATMENT OF THE PATIENTS WITH DMARD-IR RHEUMATOID ARTHRITIS IN CHINA Chien W1, Xu X2
1Fudan University, Shanghai, China, 2Shanghai Roche Pharmaceuticals Ltd., Shanghai, China

OBJECTIVES: The aim of this study was to evaluate the cost-effectiveness of tocilizumab-based regimen and other four biologic-based regimens for the treatments of DMARD-IR rheumatoid arthritis patients in China. METHODS: A network meta-analysis (NMA) was performed to combine and compare ACR response rates across all relevant studies. The real-world data on the costs of treatments, including drug, monitoring and administration fees, were collected through expert interviews in Beijing, Shanghai, Guangzhou and Chengdu city. All Patient-Assistant-Programs were considered in drug-cost calculation. The cost-effectiveness analysis was conducted per patient, per perspective. TR-SR seems to be cost-effective when compared to a SR programme. Further sensitivity analyses are required to relax the model assumptions and to assess the robustness of the model.

PMS77 TREATMENT EFFECTIVENESS AND COST-EFFECTIVENESS OF HYLAN GF-20 IN OSTEOAARTHROPSIS OF THE KNEE Kostyk A1, Alamdarya A2, Aksar A2
1Kazakh Medical University, Astana, Kazakhstan, 2Astana Medical University, Astana, Kazakhstan

OBJECTIVES: Osteoarthritis (OA) is the most common and costly bone and joint disease, and the Psoriatic Arthritis Response Criteria, Health Assessment Questionnaire and Boolean scores are frequently used in clinical trials via a Bayesian network meta-analysis. Following a payer perspective, direct costs relating to drug acquisition, administration, monitoring and overall patient management were considered (2015). RESULTS: All anti-TNF therapies yielded the most costs compared to existing treatments in the aforementioned efficacy outcomes and in terms of quality-adjusted life years (QALYs) compared to SoC. The incremental cost per QALY gained of CZP relative to SoC was €15,339 and €20,714 at 12- and 24-week response assessment period. Similarly, at the alternative willingness-to-pay threshold of €34,000, between the anti-TNFs, efficacy differences did not reach statistical significance. In terms of the mean lifetime patient cost, it ranged from €1,469 for CZP to €6,632 for infliximab, assuming a 12-week response assessment period. The total treatment fees of these five regimens within the observational period, SCS + CMM treatment reduces significantly pain intensity and demonstrates the potential savings associated with introduction of Hylan. OA of the knee, illustrate 5-weeks current costs of treating patients with the condition, and demonstrate the potential savings associated with introduction of Hylan. A Markov microsimulation model was developed to define a treatment pathway for OA of the knee, which is cost-effective relative to most other licensed anti-TNF agents in Greece. If this loss is compensated with large cost saving, we might still consider the intervention cost-effective.