

Supplemental Material

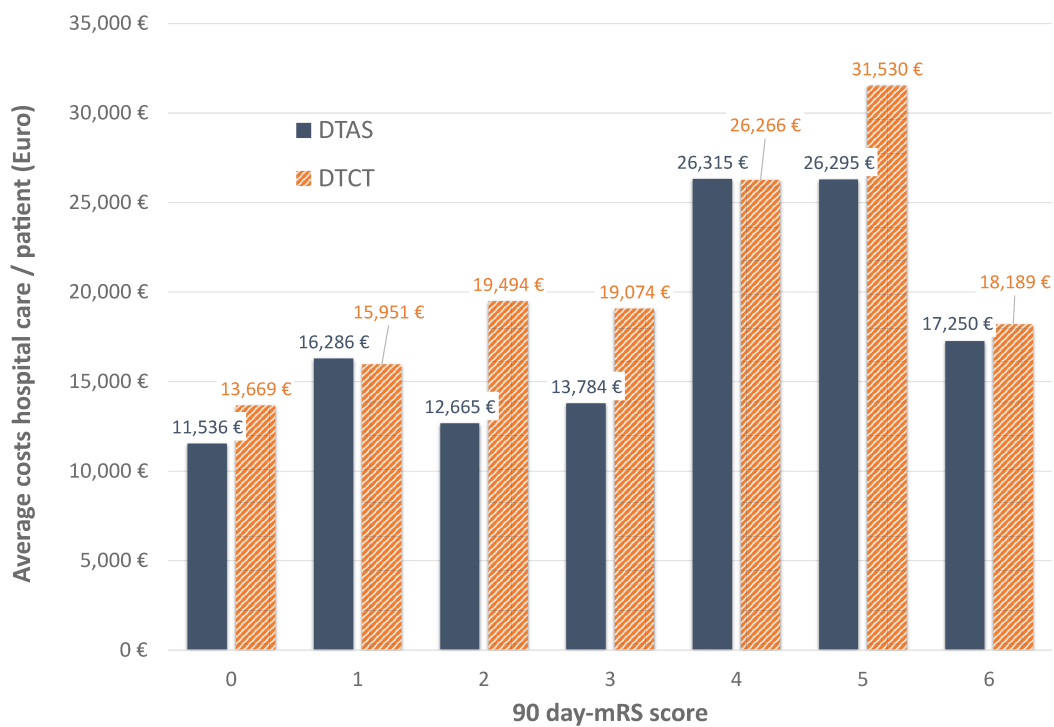
Cost-Utility of Direct Transfer to Angiography Suite (DTAS) bypassing conventional imaging for patients with Acute Ischemic Stroke in Spain: Results from the ANGIOCAT trial

| | Item | Guidance for Reporting | Reported in section |
|-------------------------------|------|---|---|
| TITLE | | | |
| Title | 1 | Identify the study as an economic evaluation and specify the interventions being compared. | Title |
| ABSTRACT | | | |
| Abstract | 2 | Provide a structured summary that highlights context, key methods, results and alternative analyses. | Abstract |
| INTRODUCTION | | | |
| Background and objectives | 3 | Give the context for the study, the study question and its practical relevance for decision making in policy or practice. | Abstract |
| METHODS | | | |
| Health economic analysis plan | 4 | Indicate whether a health economic analysis plan was developed and where available. | NA |
| Study population | 5 | Describe characteristics of the study population (such as age range, demographics, socioeconomic, or clinical characteristics). | Health outcomes, classified according to the modified Rankin Scale, were obtained from the ANGIOCAT trial (as outlined in Methods). Baseline characteristics of patient population is provided in Table 1 of Requena M, Olivé-Gadea M, Muchada M, et al. Direct to Angiography Suite Without Stopping for Computed Tomography Imaging for Patients With Acute Stroke: A Randomized Clinical Trial. <i>JAMA Neurol.</i> 2021;78(9):1099–1107. doi:10.1001/jamaneurol.2021.2385 |
| Setting and location | 6 | Provide relevant contextual information that may influence findings. | Methods - Model design |
| Comparators | 7 | Describe the interventions or strategies being compared and why chosen. | Methods - Model design |
| Perspective | 8 | State the perspective(s) adopted by the study and why chosen. | Methods - Model design Discussion |
| Time horizon | 9 | State the time horizon for the study and why appropriate. | Methods - Model design Discussion |
| Discount rate | 10 | Report the discount rate(s) and reason chosen. | Methods - Unit costs and resource utilization |
| Selection of outcomes | 11 | Describe what outcomes were used as the measure(s) of benefit(s) and harm(s). | Methods - Health state utility values and calculation of QALYs |

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|---|----|---|--|
| Measurement of outcomes | 12 | Describe how outcomes used to capture benefit(s) and harm(s) were measured. | Methods - Health state utility values and calculation of QALYs |
| Valuation of outcomes | 13 | Describe the population and methods used to measure and value outcomes. | Methods - Health state utility values and calculation of QALYs |
| Measurement and valuation of resources and costs | 14 | Describe how costs were valued. | Methods - Unit costs and resource utilization |
| Currency, price date, and conversion | 15 | Report the dates of the estimated resource quantities and unit costs, plus the currency and year of conversion. | Methods – Study design Methods – Unit costs and resource utilization |
| Rationale and description of model | 16 | If modelling is used, describe in detail and why used. Report if the model is publicly available and where it can be accessed. | Methods – Model design |
| Analytics and assumptions | 17 | Describe any methods for analyzing or statistically transforming data, any extrapolation methods, and approaches for validating any model used. | Methods – Unit costs and resource utilization |
| Characterizing heterogeneity | 18 | Describe any methods used for estimating how the results of the study vary for sub-groups. | NA |
| Characterizing distributional effects | 19 | Describe how impacts are distributed across different individuals or adjustments made to reflect priority populations. | NA |
| Characterizing uncertainty | 20 | Describe methods to characterize any sources of uncertainty in the analysis. | Methods – Sensitivity analysis |
| Approach to engagement with patients and others affected by the study | 21 | Describe any approaches to engage patients or service recipients, the general public, communities, or stakeholders (e.g., clinicians or payers) in the design of the study. | Clinicians were involved in the design of the study. Methods |
| RESULTS | | | |
| Study parameters | 22 | Report all analytic inputs (e.g., values, ranges, references) including uncertainty or distributional assumptions. | Table 1 |
| Summary of main results | 23 | Report the mean values for the main categories of costs and outcomes of interest and summarise them in the most appropriate overall measure. | Table 1 |
| Effect of uncertainty | 24 | Describe how uncertainty about analytic judgments, inputs, or projections affect findings. Report the effect of choice of discount rate and time horizon, if applicable. | Results – One way sensitivity analysis Results – Probabilistic sensitivity analysis Discussion |

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|--|----|---|---------------------------------|
| Effect of engagement with patients and others affected by the study | 25 | Report on any difference patient/service recipient, general public, community, or stakeholder involvement made to the approach or findings of the study | NA |
| DISCUSSION | | | |
| Study findings, limitations, generalizability, and current knowledge | 26 | Report key findings, limitations, ethical or equity considerations not captured, and how these could impact patients, policy, or practice. | Discussion |
| OTHER RELEVANT INFORMATION | | | |
| Source of funding | 27 | Describe how the study was funded and any role of the funder in the identification, design, conduct, and reporting of the analysis | Conflict of interest disclosure |
| Conflicts of interest | 28 | Report authors conflicts of interest according to journal or International Committee of Medical Journal Editors requirements. | Conflict of interest disclosure |

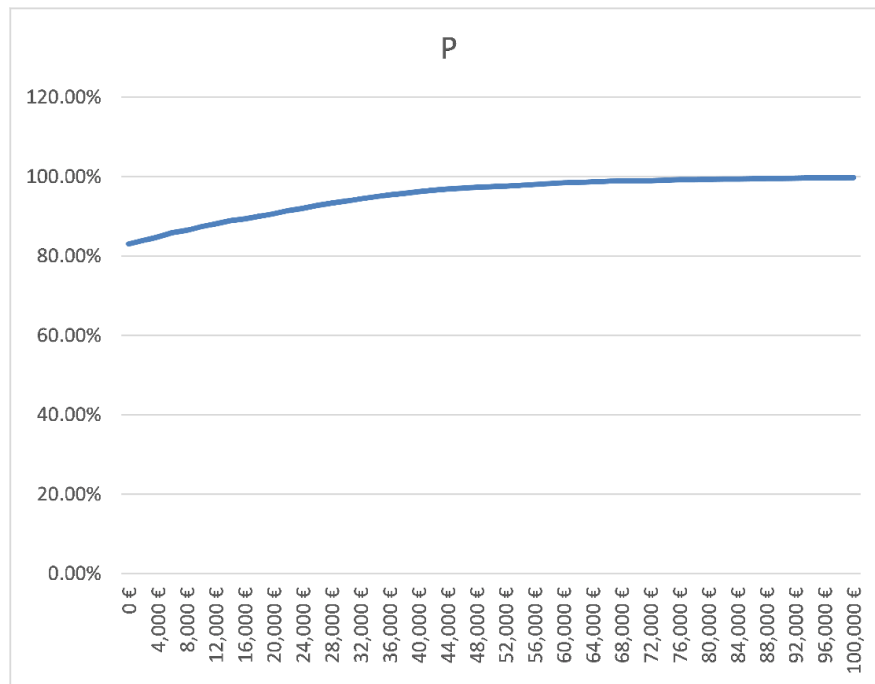
Supplemental Table I Consolidated Health Economic Evaluation Reporting Standards (CHEERS) checklist; NA: not available



Supplemental Figure 1 Average costs of hospital care / patient (Euro) versus 90-day mRS for DTAS (solid blue bars) and conventional imaging (DTCT, striped orange bars).

| | Value | Cost saving | |
|---------------------------|-------------|-------------|-------------|
| Parameter | 18,189.00 € | -2,848 € | (Base case) |
| mRS 6 (death) cost - DTCT | 2,000.00 € | 2,697 € | |
| | 4,000.00 € | 2,012 € | |
| | 6,000.00 € | 1,327 € | |
| | 8,000.00 € | 642 € | |
| | 10,000.00 € | -43 € | |
| | 12,000.00 € | -728 € | |
| | 14,000.00 € | -1,413 € | |
| | 16,000.00 € | -2,098 € | |
| | 18,000.00 € | -2,783 € | |
| | 20,000.00 € | -3,468 € | |

Supplemental Table 2 Results of the one-way sensitivity analysis of varying the cost of mRS 6 in different increments



Supplemental Figure 2 Probability of CBCT DTAS being cost-effective at different thresholds.