

### 558 Summarising the Reporting of Outcomes in Studies of Robot Assisted Cholecystectomy: A Systematic Review

C.S. Jones<sup>1,2</sup>, E. Kirkham<sup>1,3</sup>, L. Goubault<sup>3</sup>, F. Hollowood<sup>4</sup>, M. Dada<sup>4</sup>, W. Baker<sup>5</sup>, S. Pathak<sup>1,3</sup>, N. Blencowe<sup>1,3</sup>, On behalf of the RoboSurg Collaborative<sup>1</sup>

<sup>1</sup>Bristol Centre for Surgical Research, Bristol, United Kingdom, <sup>2</sup>North Bristol NHS Foundation Trust, Bristol, United Kingdom, <sup>3</sup>University Hospitals Bristol, Bristol, United Kingdom, <sup>4</sup>University of Bristol Medical School, Bristol, United Kingdom, <sup>5</sup>University of Southampton, Southampton, United Kingdom

**Background:** Robot-assisted cholecystectomy (RC) has seen increasing adoption into clinical practice despite a lack of evidence to demonstrate superiority over conventional methods. Consistency in outcome selection, definition and reporting between studies is required for effective evidence synthesis and to minimise research waste. The aim of this study was to conduct an in-depth analysis of the outcomes reported in studies of RC. This work will inform the need for a core outcome set (COS).

**Method:** Systematic searches identified all published studies reporting RC, from inception to February 2020. Outcomes reported in each manuscript were recorded verbatim and categorised into domains. All outcomes were coded in duplicate. Where reported, the follow up period of each study was documented.

**Results:** Of 1425 abstracts screened, ninety studies met the criteria for inclusion. A total of 878 outcomes were reported. Each study included a median of 8 outcomes (range 3-26). Outcome selection was heterogeneous, with those relating to technical/operative factors (n=383, 88 studies), complications (n=245, 81 studies) and health economics (n=139, 72 studies) used most frequently. No single outcome, or outcome domain, was reported in all studies. Only 30 studies reported a follow-up period, which ranged from 14 days to 46 months. In thirteen, the follow-up was for less than or equal to one month.

**Conclusions:** We identified significant heterogeneity in the selection and reporting of outcomes in studies of RC and support calls for standardisation and development of a COS.