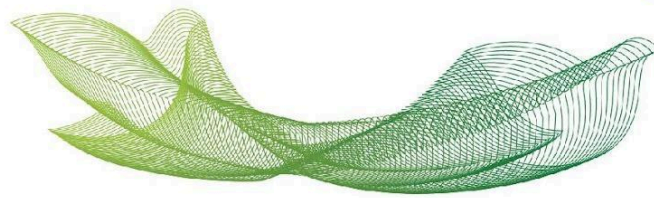


Tipo	Periódico
Título	Global access and safety of robotic-assisted surgery for inguinal hernia and gallstone disease worldwide: A pooled multinational cohort study across 110 countries
Autores	Grupo principal: Dhanya Nantha Kumar, John Buchanan, Adewale Adisa Arda Isik, Marie Carmela Lapitan, Richard Evans, Ewen M Harrison, Ewen A Griffiths, Maria Picciochi, Parvez Haque, Aneel Bhangu, Sivesh K Kamarajah, NIHR Group (USF: Fernando Augusto Lima Marson, Matheus Mendes Cordeiro, Jéssica Paula Martins, Camila Vantini Campasso Palamim, Bianca Aparecida Siqueira)
Autor (es) USF	Fernando Augusto Lima Marson, Matheus Mendes Cordeiro, Jéssica Paula Martins, Camila Vantini Campasso Palamim, Bianca Aparecida Siqueira
Autores Internacionais	Grupo principal: Dhanya Nantha Kumar, John Buchanan, Adewale Adisa Arda Isik, Marie Carmela Lapitan, Richard Evans, Ewen M Harrison, Ewen A Griffiths, Maria Picciochi, Parvez Haque, Aneel Bhangu, Sivesh K Kamarajah
Programa/Curso (s)	Programa de Pós-Graduação Stricto Sensu em Ciência de Dados em Saúde
DOI	10.62463/surgery.29
Assunto (palavras chaves)	Robotic assisted surgery, Inguinal hernia, cholecystectomy, Global surgery, Low- and Middle-Income Countries, high-income countries
Idioma	Inglês
Fonte	Título do periódico: Impact Surgery ISSN: 3033-4470 Volume/Número/Paginação/Ano: 2/7/266-277/2025
Data da publicação	Novembro/2025
Formato da produção	Impressa ou digital
Resumo	<p>Background: Robotic-assisted surgery (RAS) is rapidly expanding for common surgical procedures worldwide. This study aimed to measure global access and safety of this technology in patients undergoing inguinal hernia repair and cholecystectomy.</p> <p>Methods: This analysis included patients undergoing cholecystectomy and inguinal hernia from two contemporary global prospective cohort studies (GECKO, n=52,163; HIPPO, n=18,041). Hierarchical multilevel logistic regression models were used to quantify associations between operative approach (open, laparoscopy, RAS, minimally invasive converted to open) and surgical safety, measured by 30-day postoperative complications, adjusting for hospital, patient, and operative-level factors.</p> <p>Results: This study included 70,204 patients across 110 countries of whom 857 (1.2%) underwent RAS (high income, n=807; upper middle income, n=17; lower-middle or low income, n=33). Of RAS performed in high income countries, 480 (59.5%) were in the USA and 120 (14.9%) were in the United Kingdom. The overall 30-day complications were 15.0%, similar in patients undergoing laparoscopy (13.8%) and RAS (13.1%), but higher in open (16.8%) or minimally invasive converted to open (42.3%). In adjusted analysis compared to laparoscopy, there were no significant difference in 30-day complications with RAS (odds ratio 1.24, 95% confidence interval 0.98-1.56). However, open (2.56, 2.28-2.88) and minimally invasive converted to open surgery (3.92, 3.43-4.48) were associated with significantly higher 30-day complications.</p>



	<p>Conclusion: Early phase implementation of robotic surgery for simple surgical procedures appears safe but is concentrated in wealthier settings. Avoiding conversion from minimally invasive surgery to open surgery requires careful patient selection. Future research should focus on wider health systems evaluation including productivity, equity of adoption, and cost-effectiveness of simple procedures within the lens of a whole robotic system.</p>
Fomento	NIHR Global Health Research Unit Grant (NIHR16.136.79)