Nationwide Implementation of Robotic Minimally Invasive Surgery for Endometrial Cancer Increases Survival and Reduces Complications

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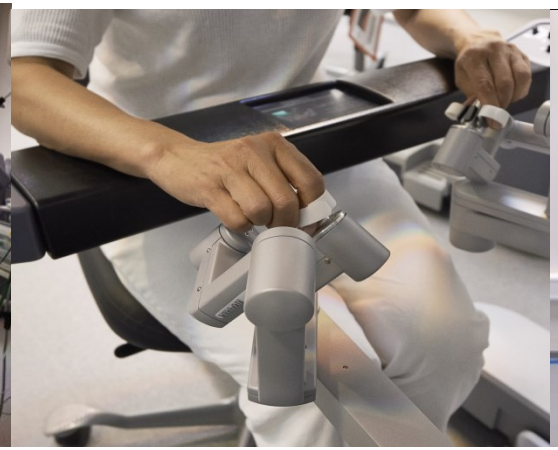
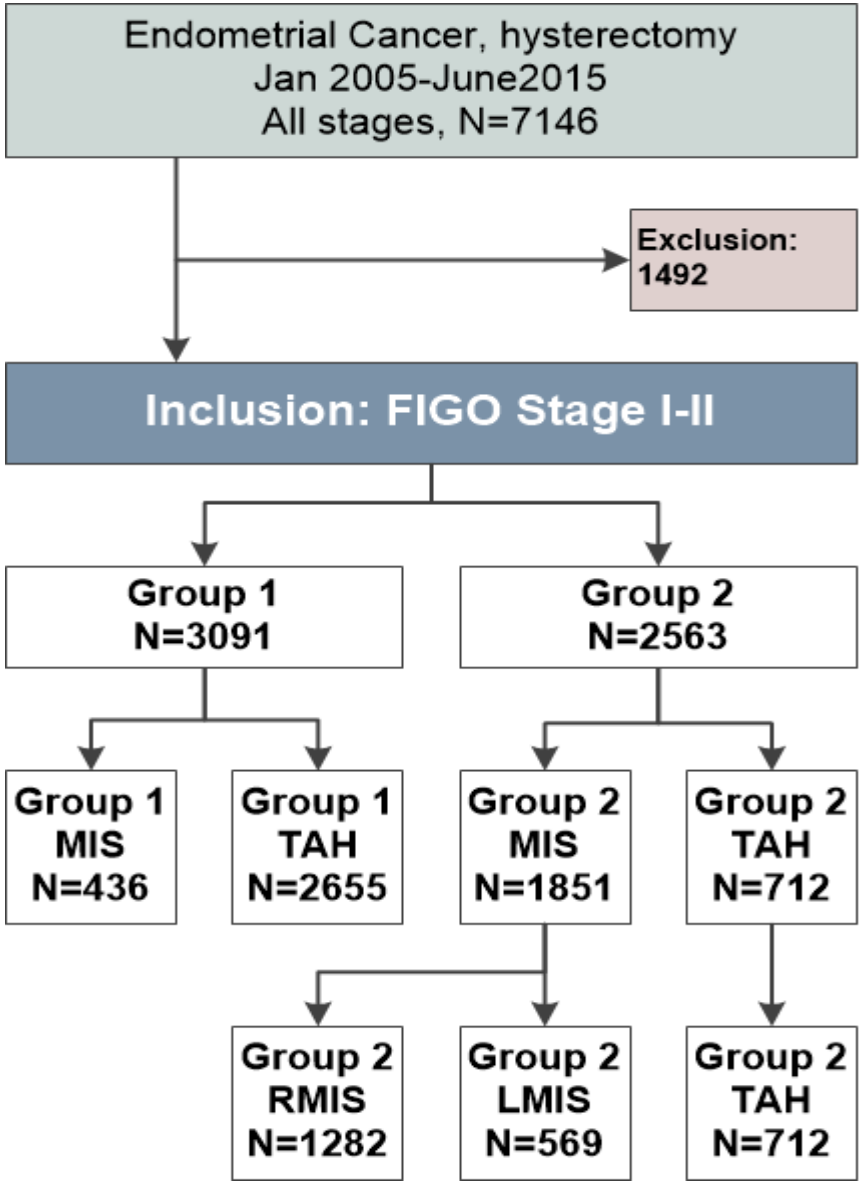


University of Southern Denmark SDU

Aim & Design

The validated Danish Gynecological Cancer Database



To determine if a nationwide implementation of robotic minimally invasive surgery influenced the risk of severe complications and survival among women with early-stage endometrial cancer

The individual woman was allocated to *Group 1 if operated BEFORE* and to *Group 2 if operated AFTER* RMIS implementation in her county

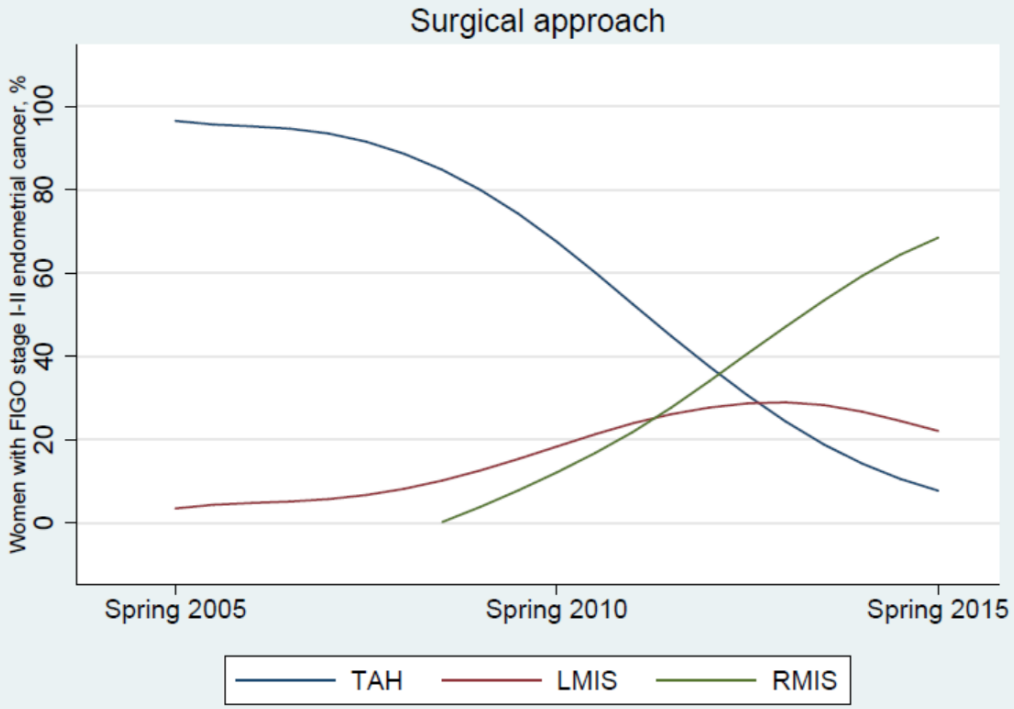
TAH, Total Abdominal Hysterectomy
LMIS, Laparoscopic Minimally Invasive Surgery
RMIS, Robotic Minimally Invasive Surgery

Severe complications

Nationwide implemetation of RMIS transitioned the surgical approach

From 97% open to 95% MIS over a decade

MIS reduces severe complications

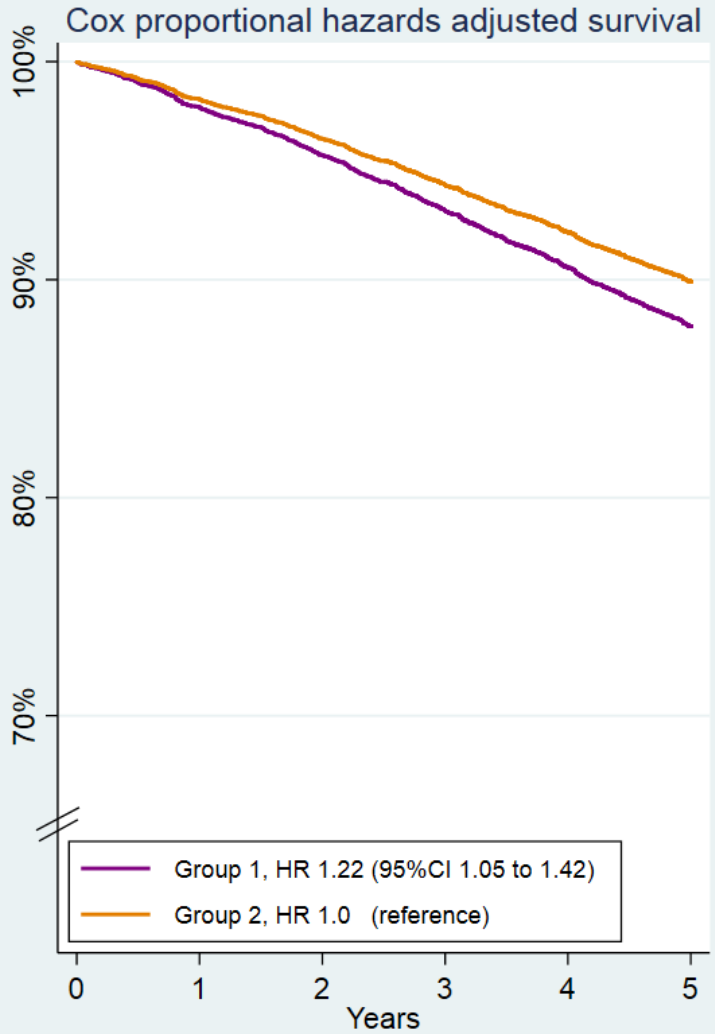


	Severe complications	Multivariate logistic regression	
Group 1, overall	7.3%	OR, 1.39	(95% CI 1.1-1.74)
Group 2, overall	6.2%	Reference	
Group 2, TAH	11.4%	OR, 2.91	(95% CI 2.01-4.23)
Group 2, LMIS	5.1%	OR, 1.39	(95% CI 0.87-2.23)
Group 2, RMIS	3.9%	Reference	

TAH, Total Abdominal Hysterectomy
LMIS, Laparoscopic Minimally Invasive Surgery
RMIS, Robotic Minimally Invasive Surgery
Group 1, Before RMIS implementation
Group 2, After RMIS implementation

Survival estimates

Adjusted Cox proportional hazards



The 5-year survival was significantly **lower before RMIS** was implemented

The 5-year survival was significantly **lower following TAH**

No difference was found between **LMIS and RMIS**

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Group 1, Before RMIS implementation
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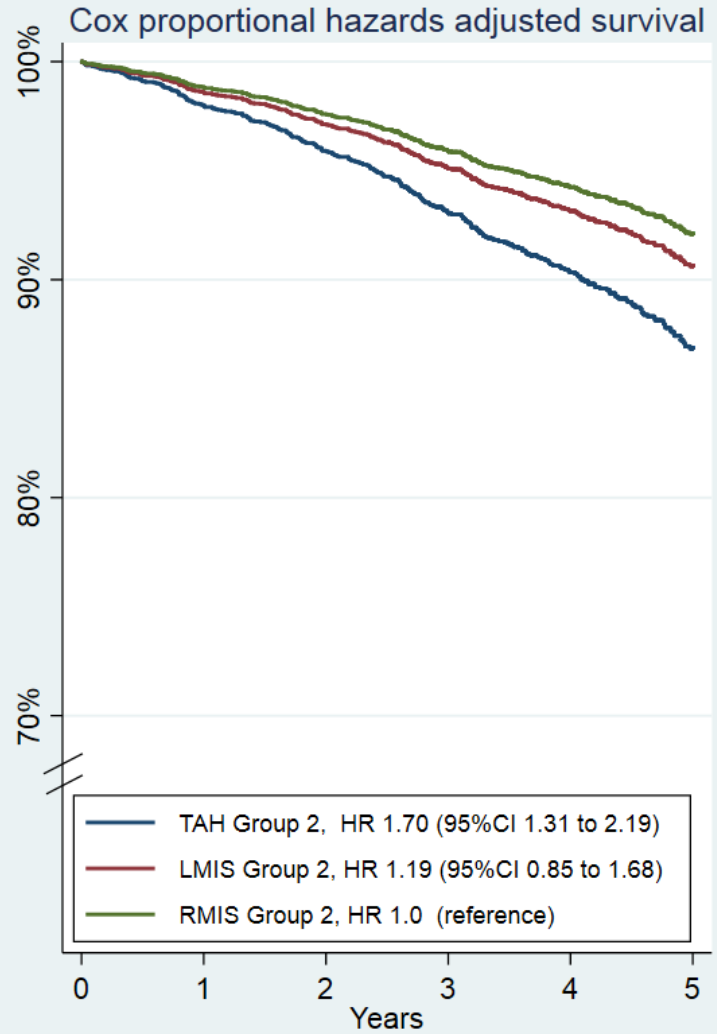

Conclusion

The Danish nationwide implementation
of robotic surgical availability
enabled a paradigm shift
towards minimally invasive surgery

This translated into
reduced risk of severe complications and increased survival.