



**VŠEOBECNÁ FAKULTNÍ
NEMOCNICE V PRAZE**



**1. LÉKAŘSKÁ
FAKULTA**
Univerzita Karlova

Ventricular arrhythmias in patients with implanted ICD: a post hoc analysis of Prague OHCA trial

Iveta Šotolová, Martin Válek, Jan Bělohlávek



ICD in secondary prevention

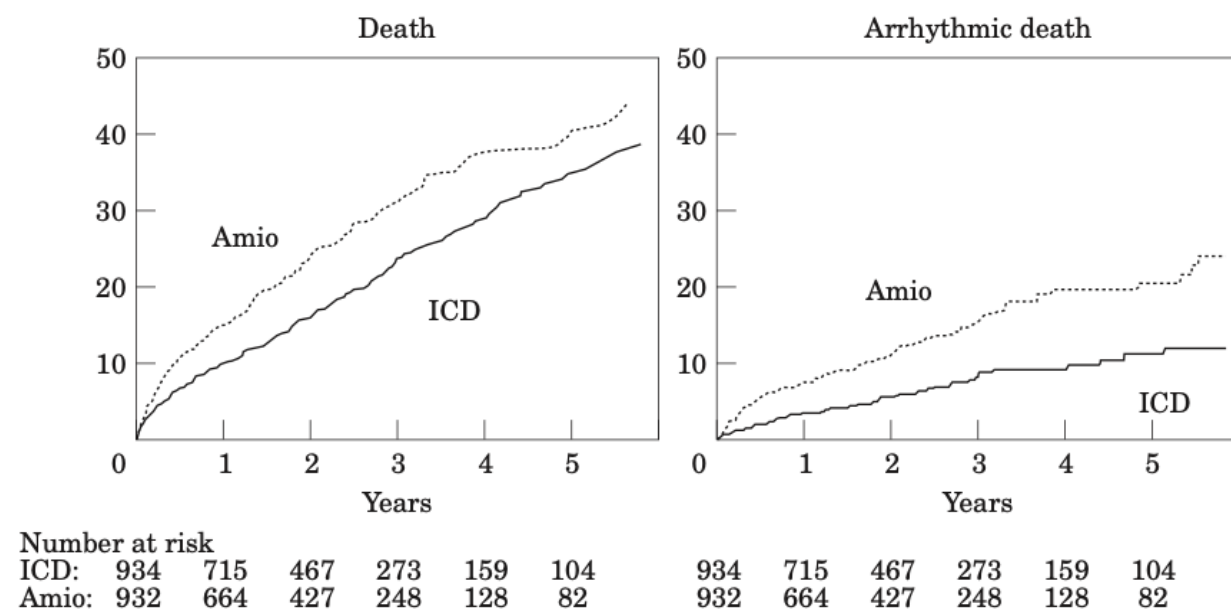


Figure 1 Cumulative risk of fatal events or the amiodarone (...) and ICD (—) treatment arms.

Zeppenfeld et al: 2022 ESC Guidelines for the management of patients with ventricular arrhythmias and the prevention of sudden cardiac death

Eur Heart J., Vol. 21, December 2000

Sudden cardiac death

Investigation for reversible causes (e.g. electrolyte imbalances, ischaemia, hypoxaemia, fever) ^c is recommended in patients with VA. ^{292,298}	I	C
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Despite a possible correctable cause for the presenting VA, the need for ICD implantation should be considered based on an individual evaluation of the risk of subsequent VA/SCD. ^{286,296,299}	IIa	C
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THE PRAGUE OHCA TRIAL POST-HOC ANALYSIS

Aims and objectives

- specify cumulative incidence of malignant arrhythmias during follow-up in survivors of refractory OHCA partially treated with ECPR with later ICD / CRT-D implantation

Characteristics of included patients

	Invasive strategy	Standard strategy
No. of patients	17	14
Age (years)	60	54
Sex (men, %)	76%	93%
No. of prehospital defibrillation attempts	4.8	4.2
Time of CPR/arrest (min)	55	32
Follow up (months)	41	35

Causes of cardiac arrest

	Invasive strategy	Standard strategy
Coronary artery disease	5	4
Acute coronary syndrome	5	4
Cardiomyopathy	0	3
Brugada syndrome	1	0
Heart failure	5	2
Myocarditis	1	1

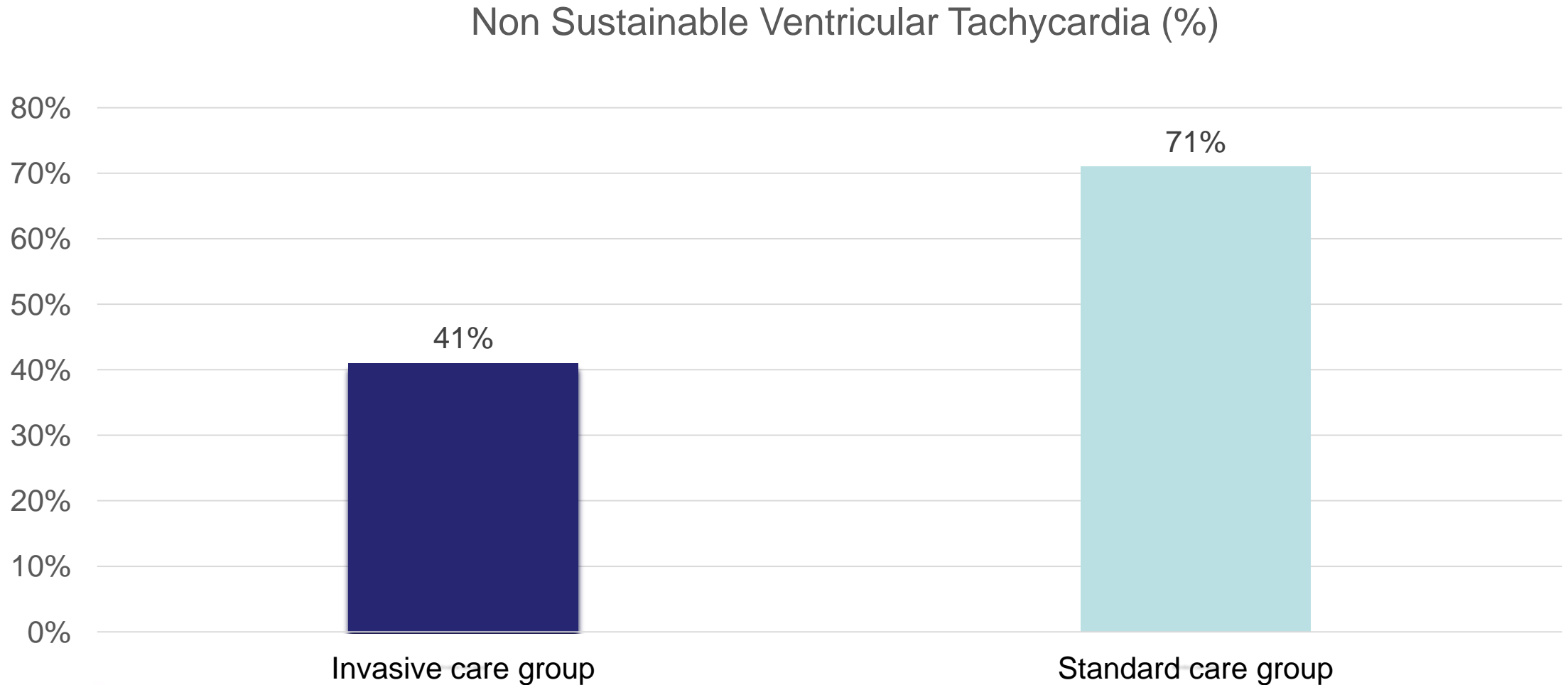
Types of devices

	Invasive group	Standard group
Single chamber ICD	12	11
Dual chamber ICD	1	1
CRT-D	4	2
Total	17	14

RESULTS OF A POST-HOC ANALYSIS



Detection of NSVT in follow up interrogations



Presence of arrhythmias/ICD therapies

	Invasive strategy	Standard strategy	p
Arrhythmias in VT zone	24% (4)	36% (5)	0,46
Arrhythmias in VF zone	18 % (3)	43% (6)	0,12
ATP	24% (4)	36% (5)	0,46
Shocks	18 % (3)	43% (6)	0,12
Electric storm	6% (1)	21% (3)	0,20

Conclusion

- ventricular arrhythmias seemed to be more frequently detected in the standard rather than in the invasive group
- reasons remain unclear

Future directions

- to compare patients who were randomized in Prague OHCA trial with registries of patients after out-of-hospital cardiac arrest