

図1：本邦におけるFontan手術成績の推移(GTCVS annual reportより)

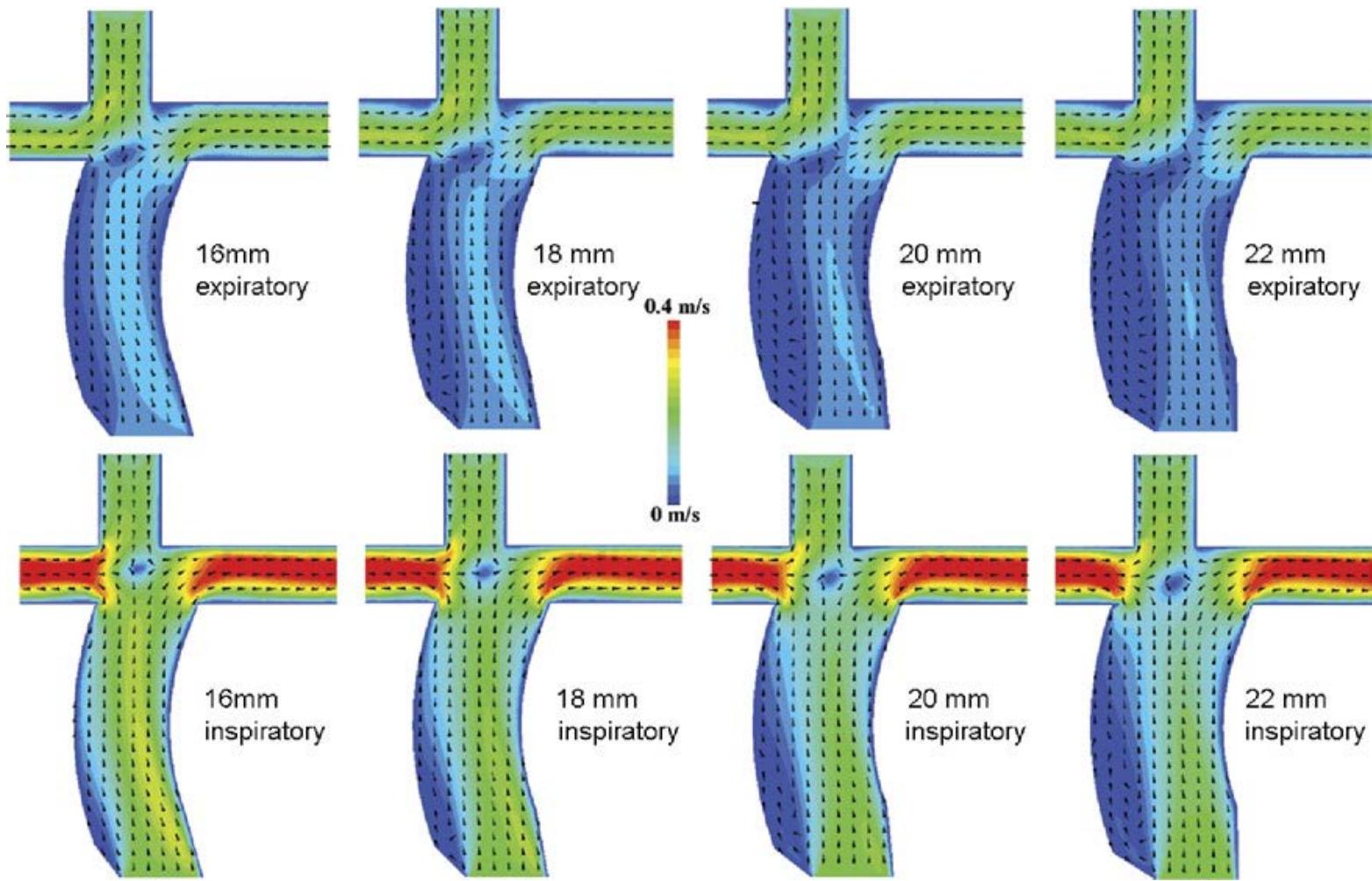
Author	Journal	Period (number)	Fontan type	Survival
Khairy <sup>9)</sup> (Boston)	Circulation 2008	born~1985 (261)	APC: 135, Bjork: 25, LT:98 ECC: 3	76.5%/10yrs 69.2% / 20yrs
Hirsch <sup>10)</sup> (Michigan)	Ann Surg 2008	1992~2007 (636)	LT: 585 ECC:51	89%/10yrs 87%/14yrs
Tweddell <sup>11)</sup> (Wisconsin)	ATS 2009	1994~2007 (256)	LT: 81 ECC: 175	89%/10yrs
Dabal <sup>12)</sup> (Alabama)	JTCVS 2014	1998~2011 (207)	IAC: 61 ECC: 146	88%/10yrs 77%/20yrs
Nakano <sup>13)</sup> (Fukuoka)	EJCTS 2015	1994~2014 (500)	ECC: 500	96.2%/10yrs 92.8%/15yrs
Pundi <sup>14)</sup> (Mayo)	JACC 2015	1973~2012 (1052)	APC: 616 LT: 262 ECC:120	74%/10yrs 61%/20yrs 43%/30yrs

APC = atrio pulmonary connection; LT = lateral tunnel; ECC = extracardiac conduit

表1：過去10年におけるフォンタン手術の長期成績

Author	Journal	Pt. N/ age	Arrhyth mia Op	Operative death	Late Death/HTx	Arrhythmia recurrence
Takahashi <sup>25)</sup>	Int J Cardiol 2009	40 / 19y	21	6 (15%)	1 (3%)	5/18, 28%
Aboulhosn <sup>26)</sup>	Congenit Heart Dis 2010	27 / 30y	21	2 (7%)	unclear	3/21, 14%
Hiramatsu <sup>27)</sup>	EJCTS 2011	38 / 26y	22	3 (8%)	5 (13%)	2/21, 10%
Sridhar <sup>28)</sup>	Cardiol Young 2011	15 / 26y	15	2 (13%)	0	2/13, (15%)
Mossad <sup>29)</sup>	Anesthesiol Clin 2013	61 / 21y	unclear	0	3 (5%)	18%
Terada <sup>30)</sup>	Asian Cardiovasc Thorac Ann 2014	24 / 21y	24	0	1 (4%)	3/12 (25%)
Jang <sup>31)</sup>	EJCTS 2014	31 / 14.4y	26	1 (3%)	3 (10%)	4/24 (17%)
Said <sup>32)</sup>	ATS 2014	70 / 23y	49	10 (14%)	10 (17%)	8/49 (16%)
Poh <sup>33)</sup>	EJCTS 2016	39 / 24y	37	4 (10%)	6 (15%)	7/37 (19%)
Deal <sup>34)</sup>	ATS 2016	139/ 23y	139	2 (1.4%)	25 (18%)	31/136 (23%)
Higashida <sup>35)</sup>	ATS 2017	32 / 24y	29	4 (12.5%)	3 (10%)	8/29(28%)
total		<b>516</b>	84%	7%	12%	20%

表2： TCPC conversionの成績



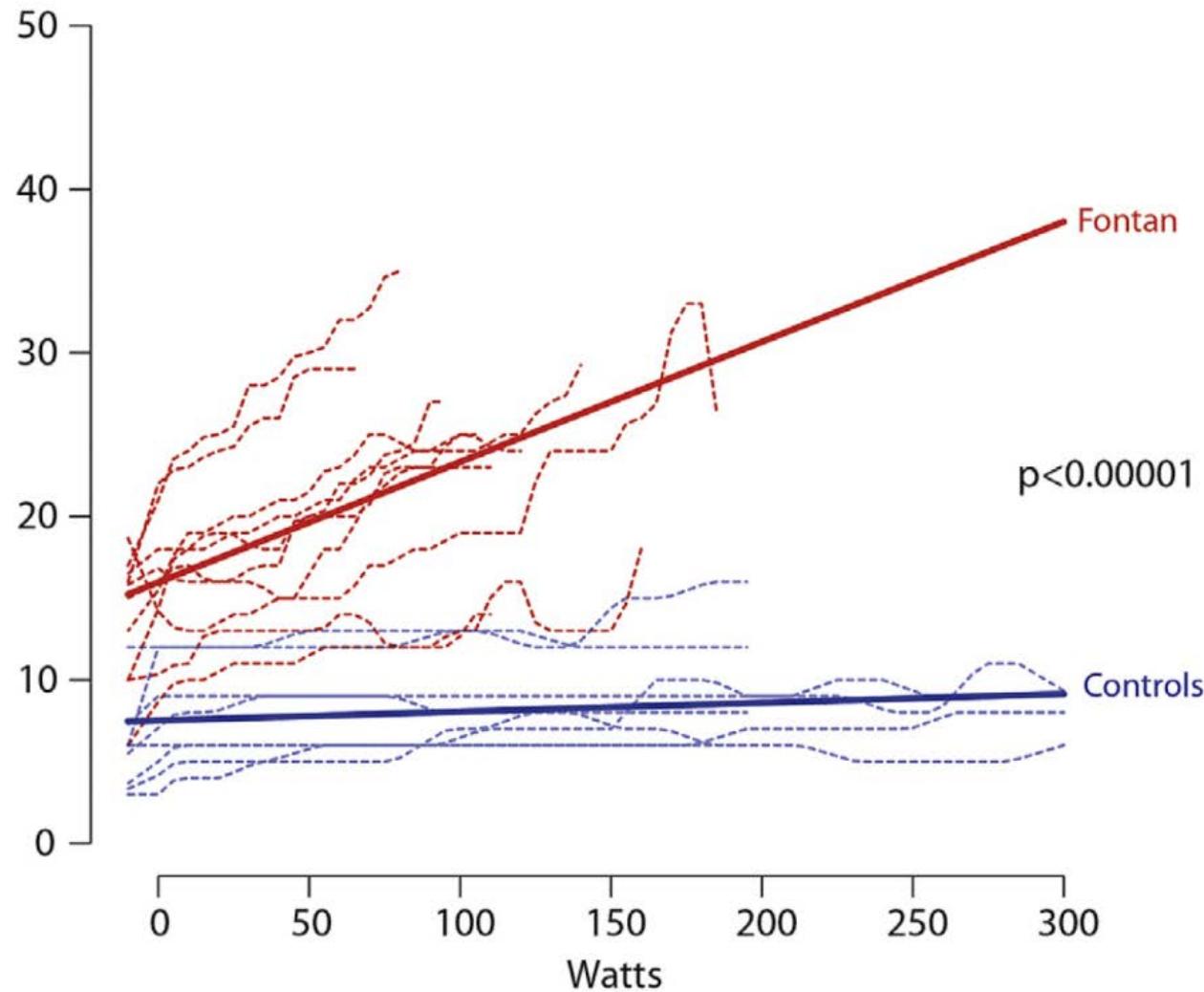
(上段) 吸気時、(下段) 呼気時

Itatani K. Ann Thorac Surg 2009; 88: 565-73より引用

図2:導管サイズによる安静時血流特性と滞留

Systemic venous pressure

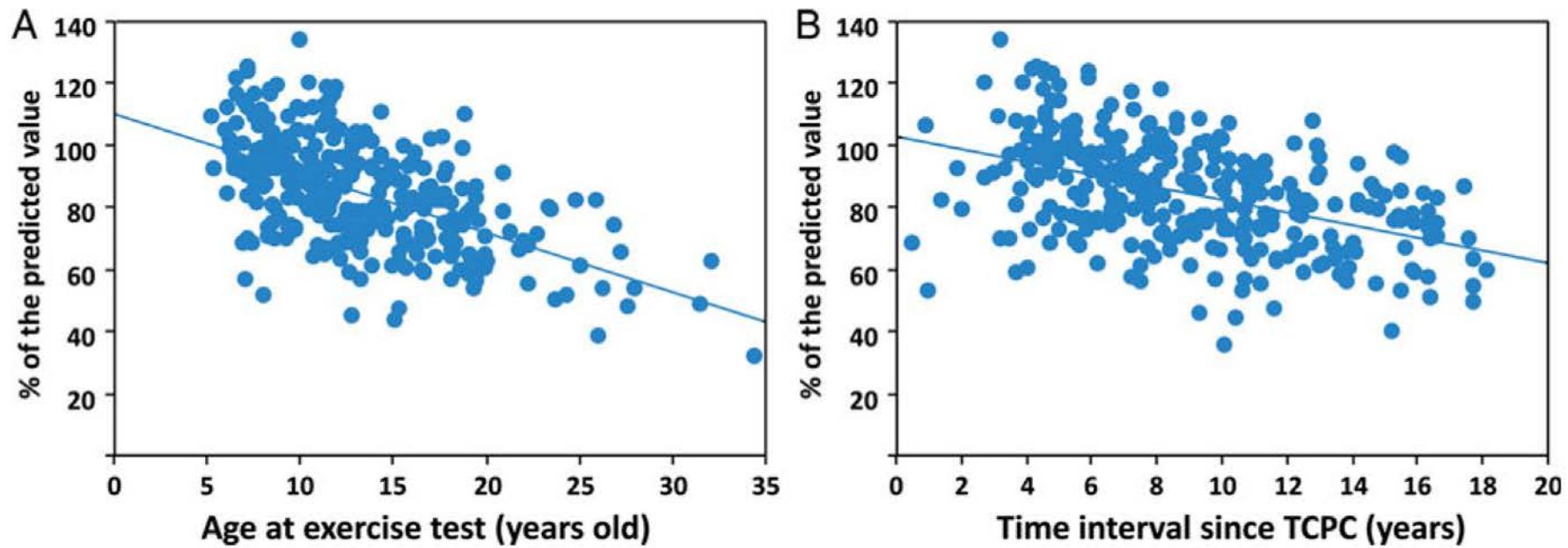
SVP (mmHg)



Navaratnam D. Am J Cardiol 2016; 117: 1667-71より引用

図3:運動負荷による中心静脈圧の変動

## Percent predicted value of peak VO<sub>2</sub>



Nakano T. Eur J Cardiothorac Surg 2015; 48: 825-32より引用

図4：フォンタン術後運動耐容能の経年変化