XV CONGRESSO SUL BRASILEIRO DE UROLOGIA
I JORNADA DE FISIOTERAPIA PÉLVICA
PORTO ALEGRE | RS
24 A 26 DE NOVEMBRO DE 2022
SBU SOCIEDADE BRASILEIRA DE UROLOGIA Secção Rio Grande do Sul
SBU SOCIEDADE BRASILEIRA DE UROLOGIA Secção Santa Catarina
SBU SOCIEDADE BRASILEIRA DE UROLOGIA Secção Paraná

Inseminação intra-uterina e Fertilização *in vitro*

Edson Borges Jr.

FERTILITY

Técnicas de Reprodução Assistida

- Conjunto de técnicas variadas que incluem a manipulação e a aproximação de gametas
- Todo o procedimento no qual o médico interfere de alguma forma, manuseando gametas e/ou pré- embriões

Técnicas de Reprodução Assistida

- Inseminação Intra-uterina (IIU)
- Fertilização *in vitro* (FIV)
- Injeção Intracitoplasmática (ICSI)

Técnicas de Reprodução Assistida

- *Inseminação Artificial*: coleta do sêmen por masturbação; preparo seminal em laboratório (processamento seminal) e inseminação intra-uterina

❖ Indução da ovulação com medicações hormonais

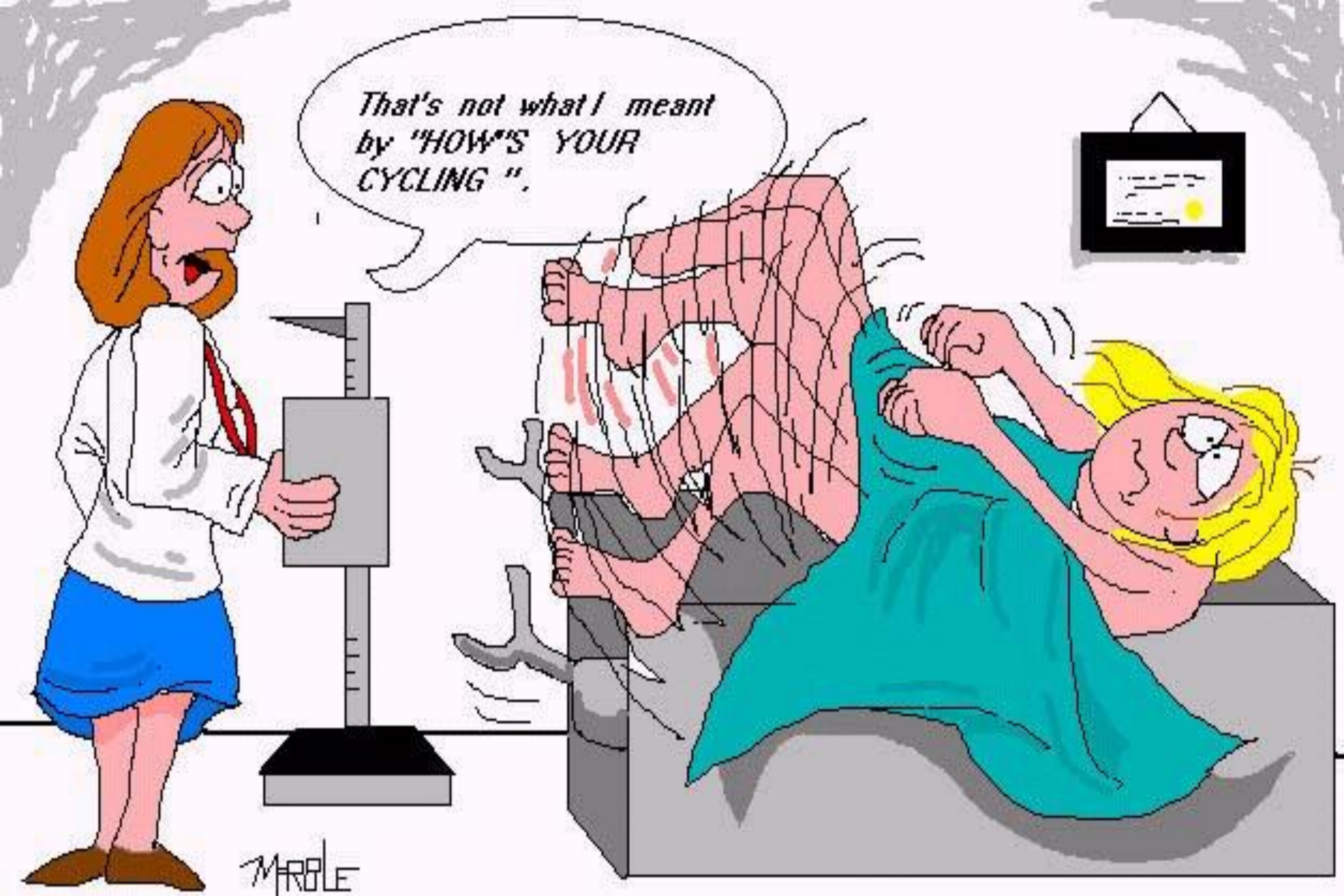
❖ Acompanhamento com ultrassonografia transvaginal e dosagens hormonais

Técnicas de Reprodução Assistida

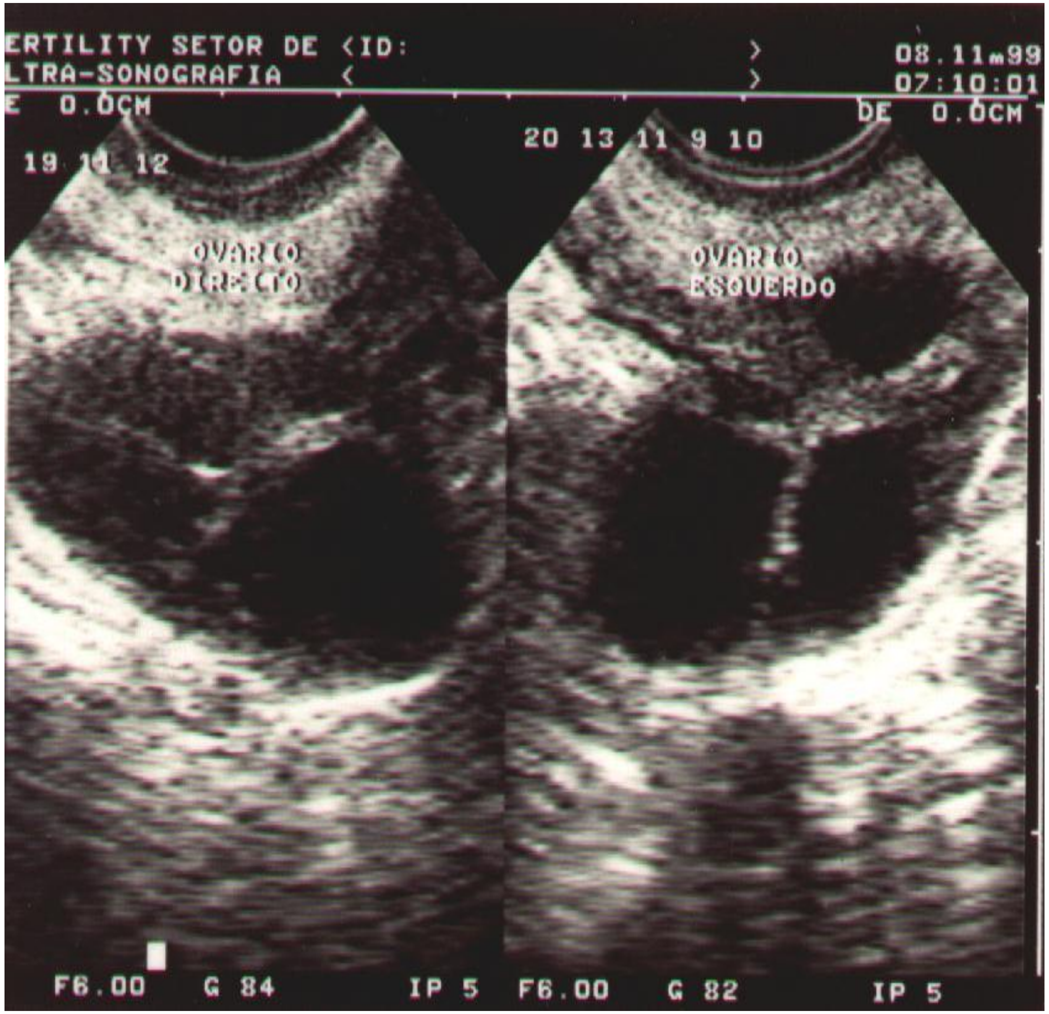
- *Fertilização in vitro*: inseminação de cada óvulo com ~50.000 espermatozóides; cultivo dos embriões em laboratório por 2 – 5 dias

- *ICSI*: injeção de um único espermatozóide dentro do óvulo; cultivo dos embriões em laboratório por 2 – 5 dias

- ❖ Punção dos óvulos sob anestesia geral (sedação); coleta dos espermatozóides por masturbação ou punção / biópsia testicular


That's not what I meant by "HOW'S YOUR CYCLING".
MARBLE

Monitorização Ultrassonográfica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OVARIO DIREITO
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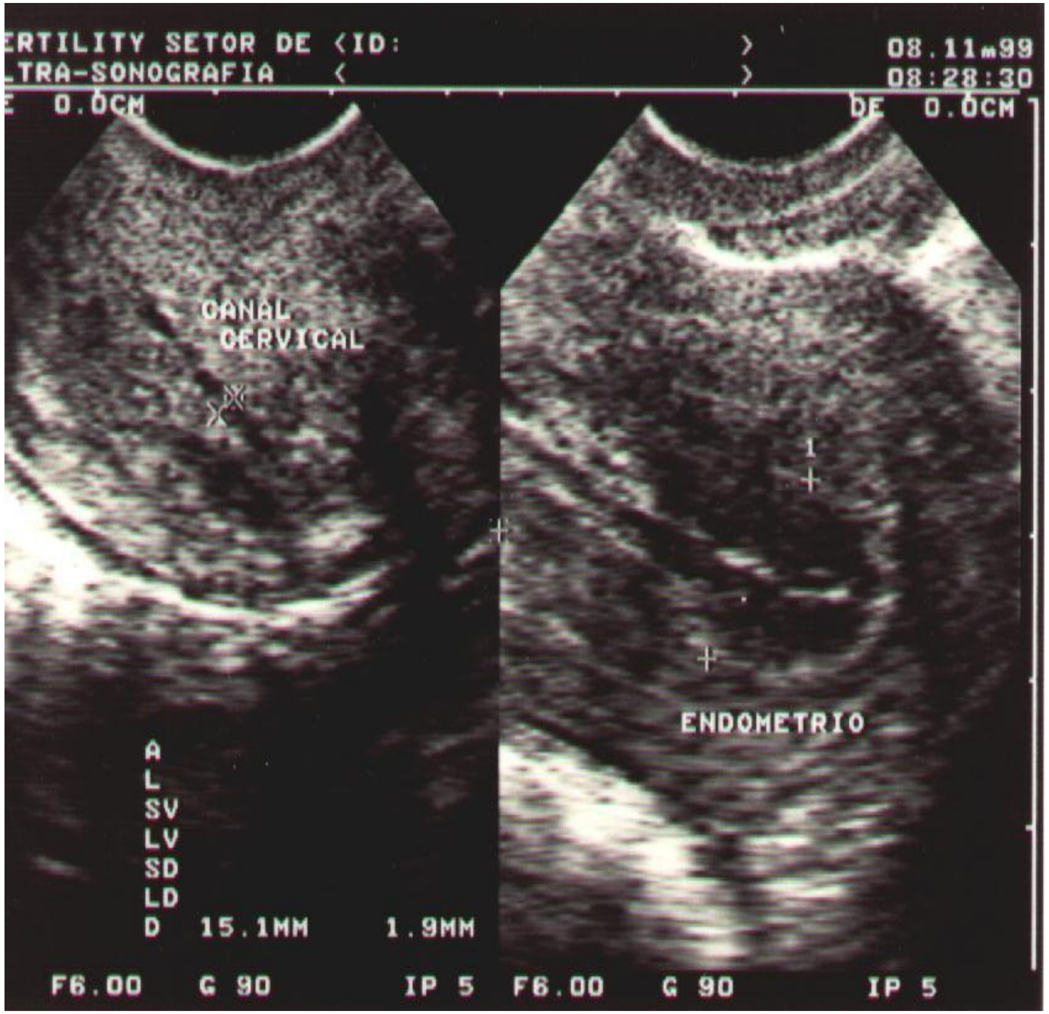
F6.00 G 84 IP 5
F6.00 G 82 IP 5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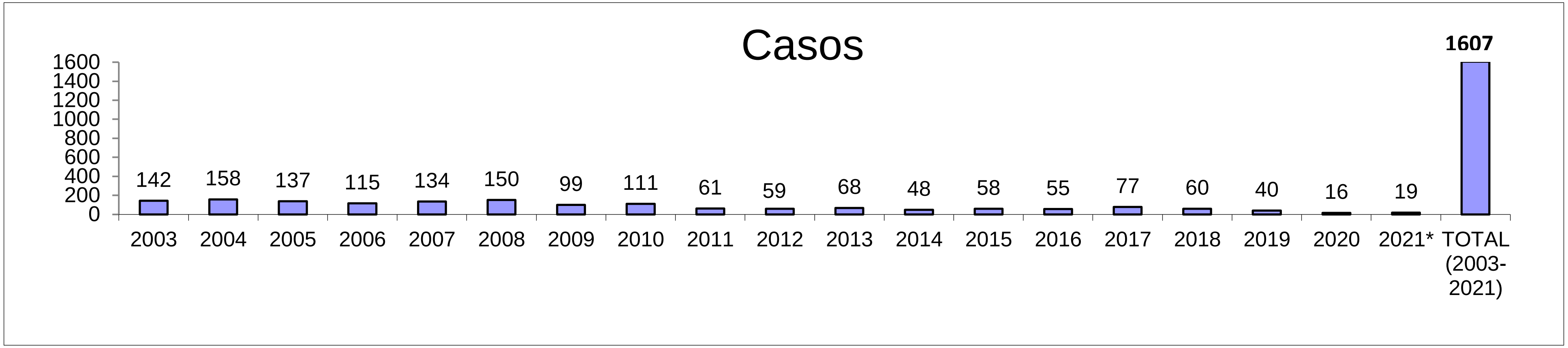
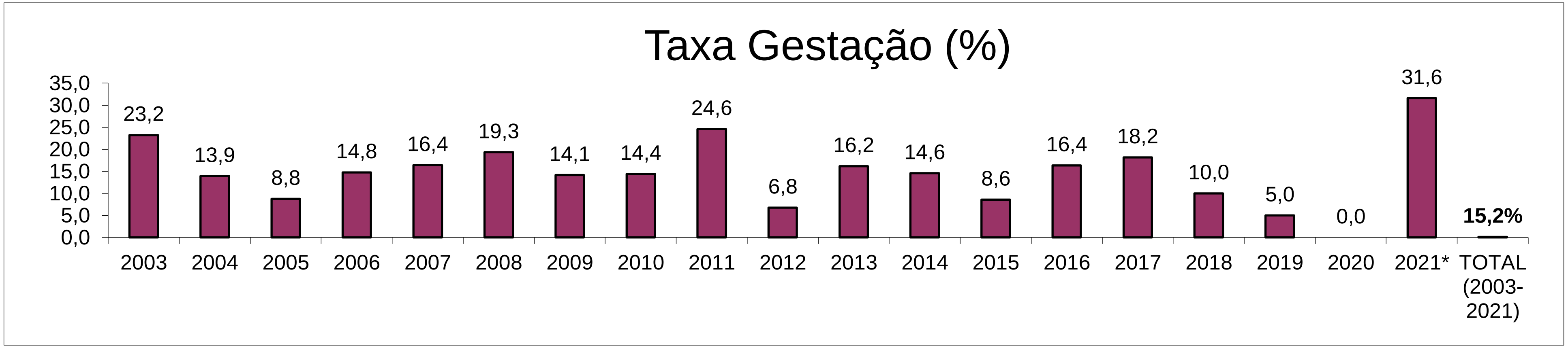
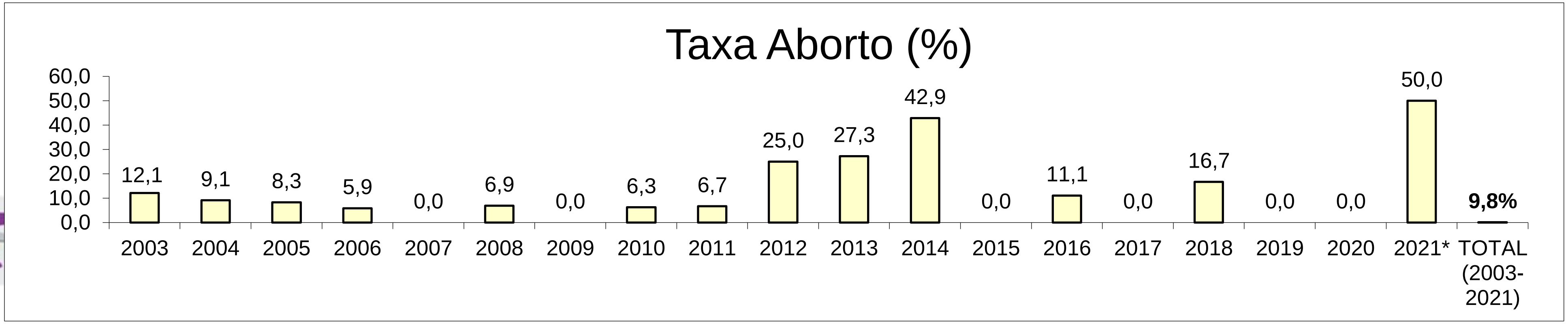
F6.00 G 90 IP 5

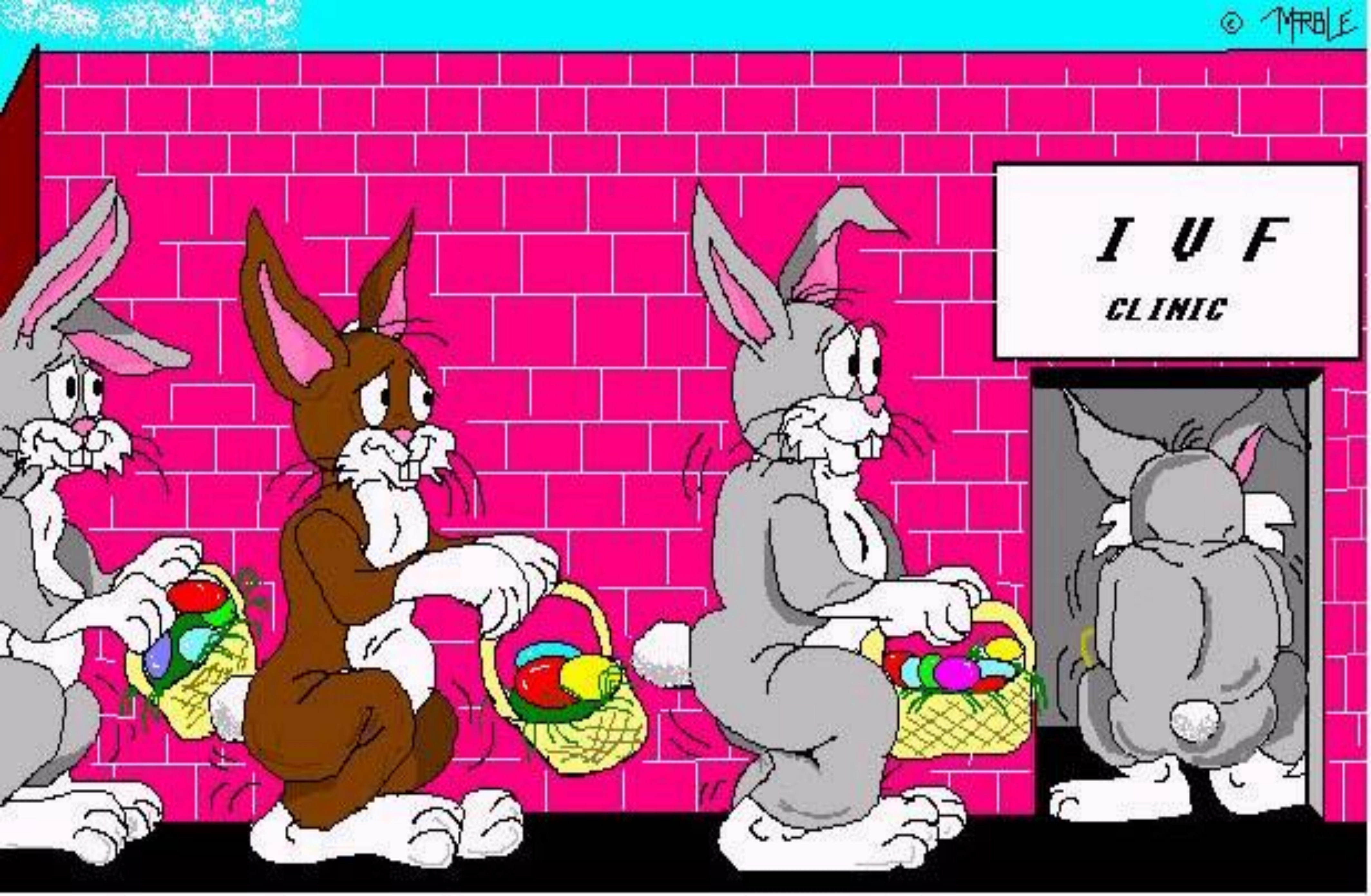
Inseminação Intra-Uterina (IIU)

IIU – Fertility (2003 – 2021)








© MARBLE
I V F
CLINIC

PUNÇÃO FOLICULAR

FERTILITY

FIV / ICSI

TRANSFERÊNCIA

25 de julho de 1978

Louise Toy Brown

(Oldham General Hospital de Manchester, Inglaterra)

Patrick Steptoe e Robert Edwards

Universidade Livre da Bélgica
primeira gestação por **ICSI, 1992**

07 de outubro de 1984

(São José dos Pinhais, PR)

Ana Paula Caldeira

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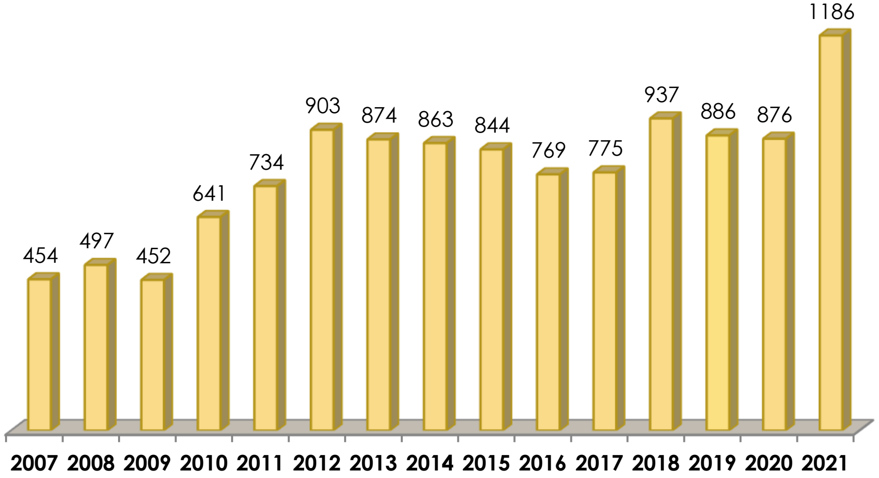
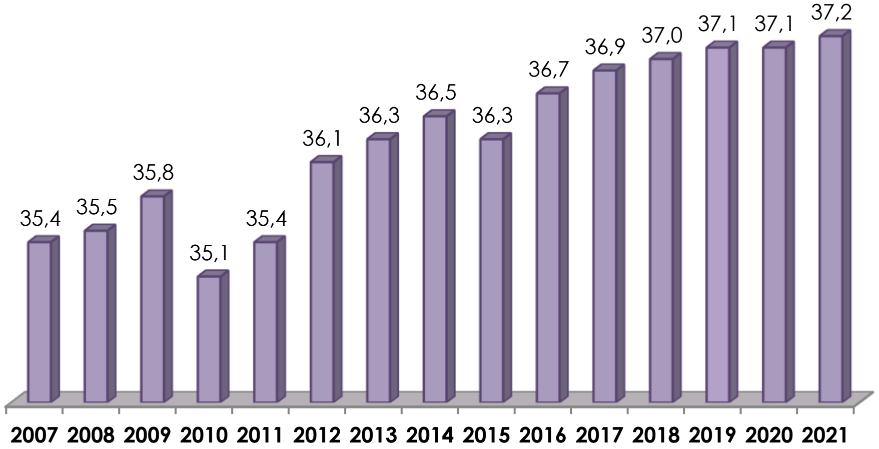
Resultados ICSI - Fertility

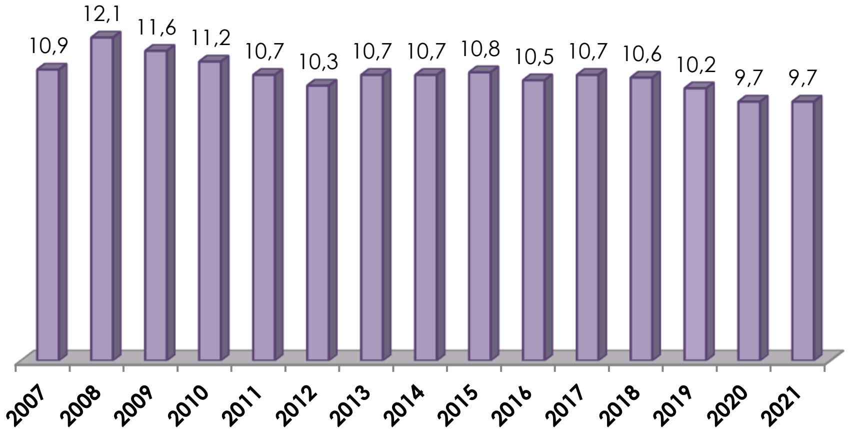
Nº de ciclos



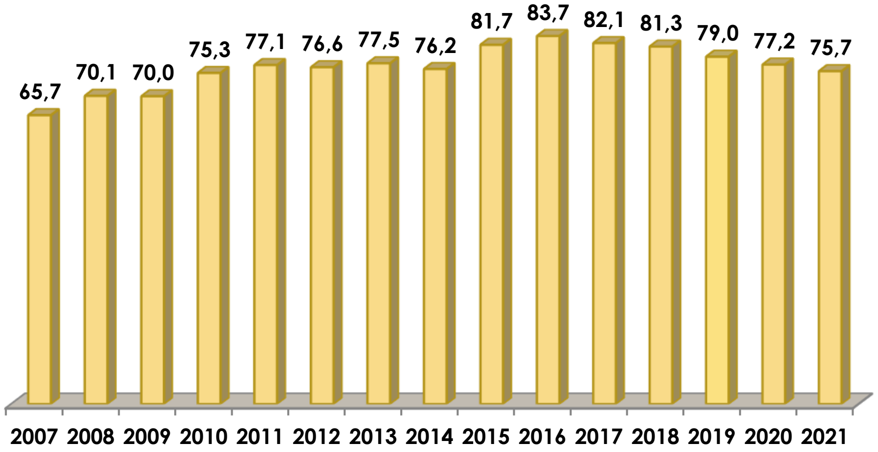
Idade média (anos)



Média de oócitos recuperados

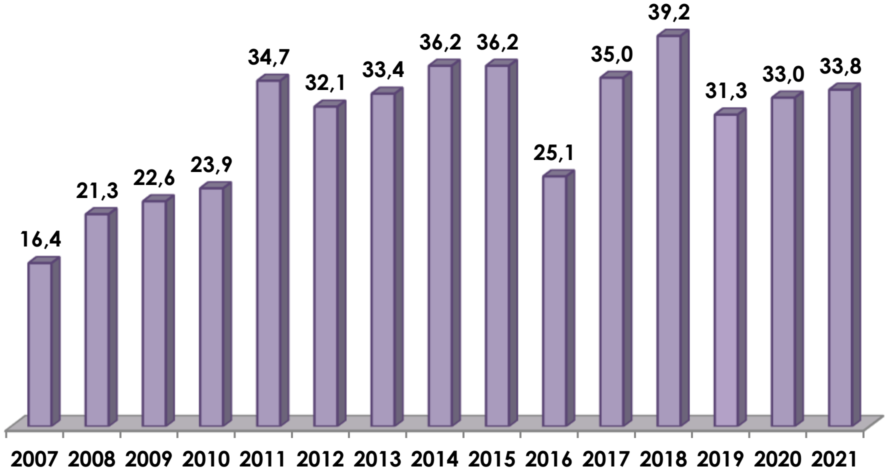


Tx de fertilização normal (%)

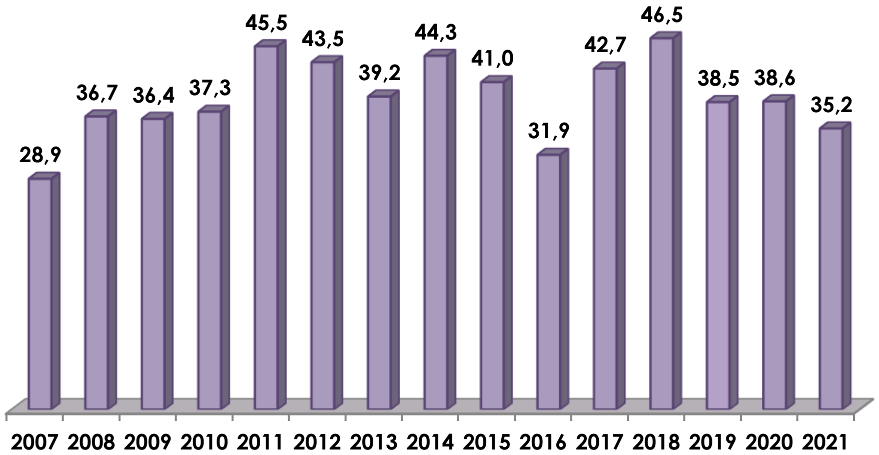


Resultados ICSI - Fertility

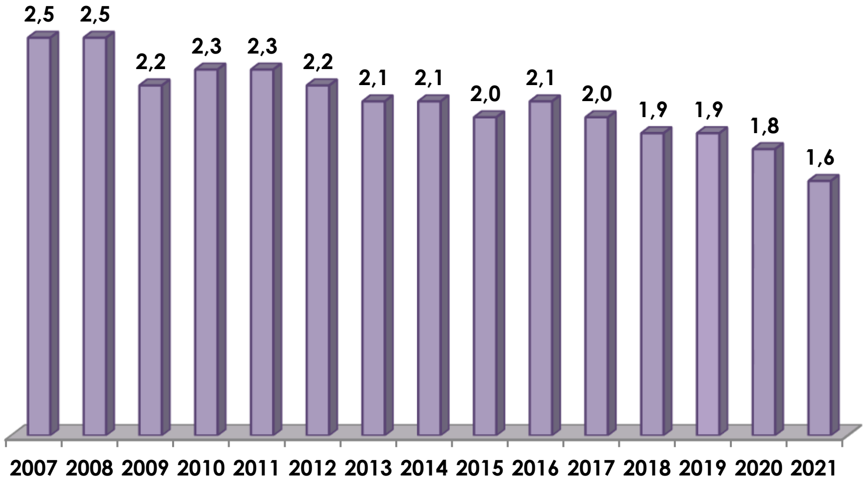
Tx de implantação (%)



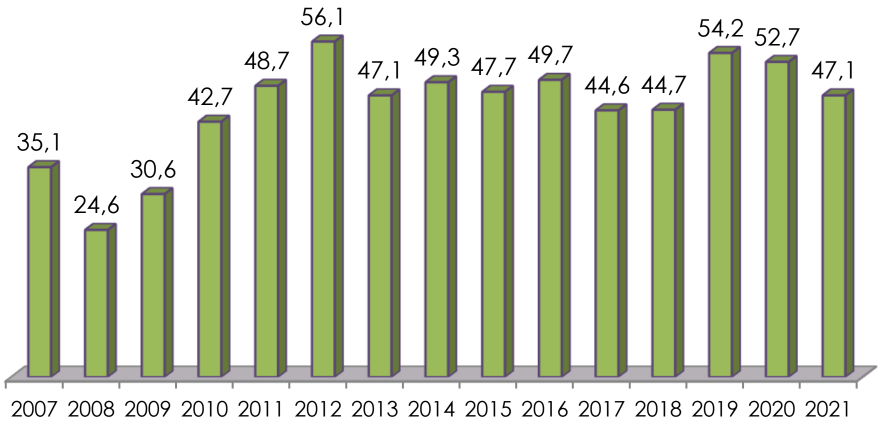
Tx de gestação clínica/ciclo transferido (%)



Média de embriões transferidos



DESCONGELAMENTO
Tx gestação clínica / ciclo transferido (%)



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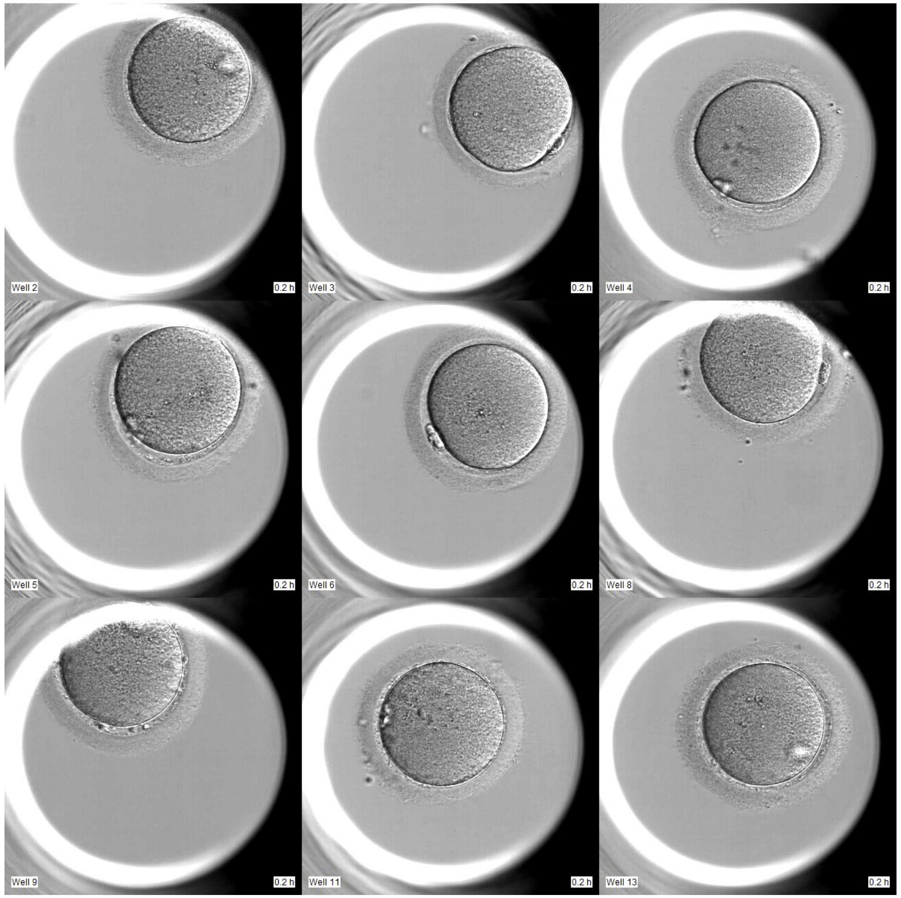
Embryoscope FERTILITY

- 427 ciclos
- 372 pacientes

✓3.020 ovócitos cultivados
✓2.398 2PN (79,4%)
✓1.488 blastocistos: *62,1% 2PN*

☐ 2018: *49,9% 2PN*


Well 2
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Well 3
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Well 4
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Well 5
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Well 6
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Well 8
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Well 9
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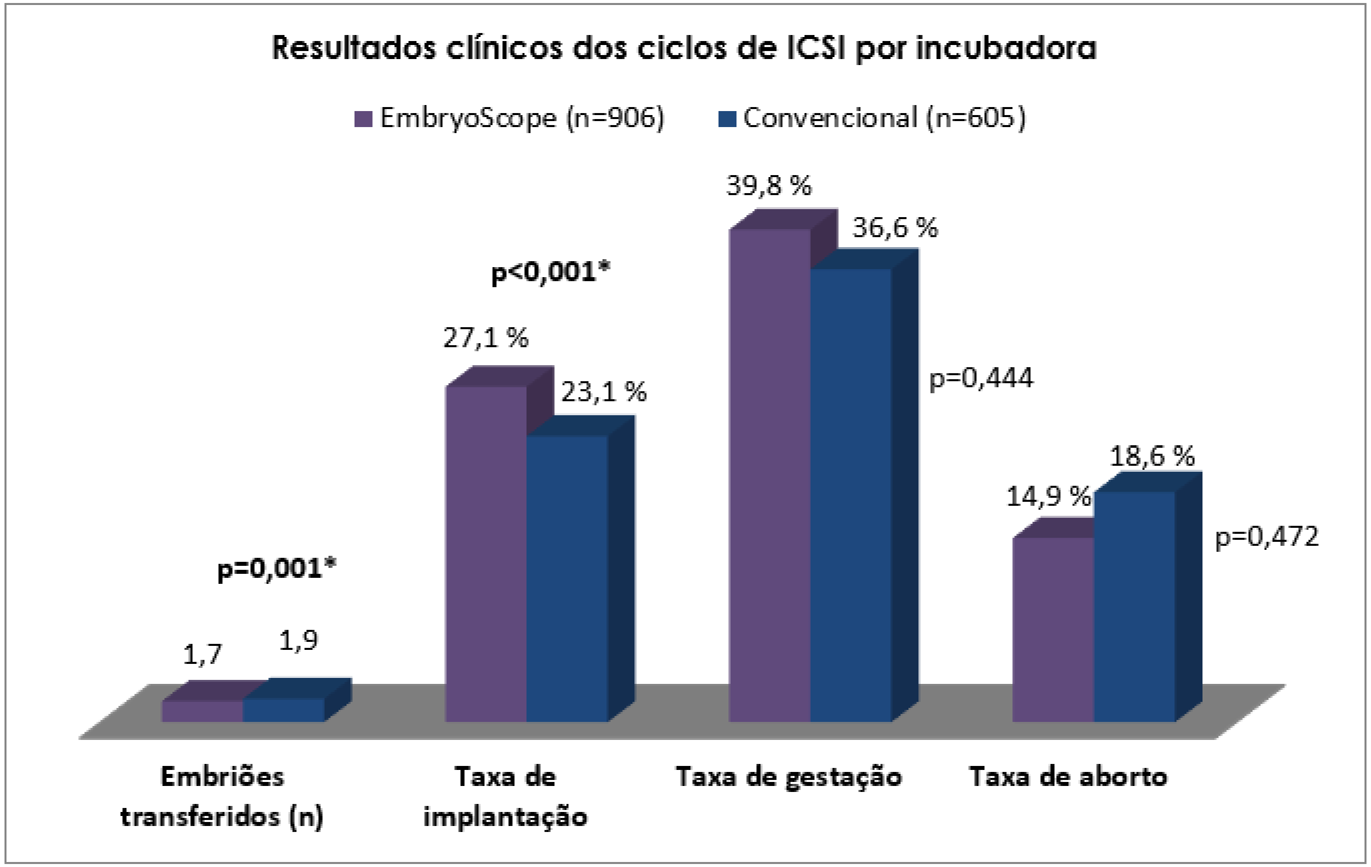
Well 11
0.2 h
Well 13
0.2 h

Fertility

EMBRYOSCPE



* Diferença estatisticamente significante

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Morbidade da gestação múltipla

Red Latinoamericana de Reproducción Asistida

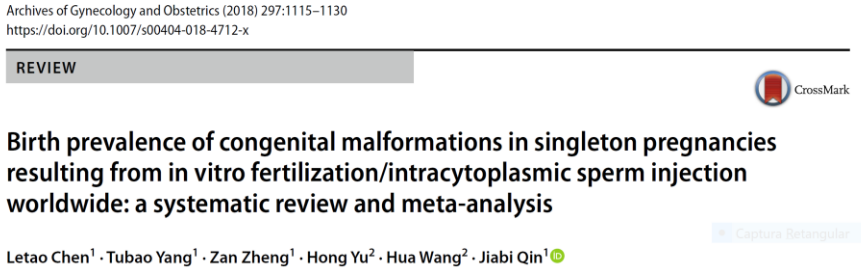
RLA
Registro Latinoamericano de Reproducción Asistida

	Únicos	Duplos	≥ Triplos
Nascidos vivos*	116523	67472	13037
Natimorto	1069	1028	462
Neomorto	539	855	487
Mortalidade Perinatal**	**13,6 ‰**	**27,2 ‰**	**67,8 ‰**

* Excluem-se os neomortos

** Mortalidade perinatal = $\frac{\text{Natimortos + Neomortos}}{\text{nascidos vivos* + natimortos + neomortos}}$

FERTILITY



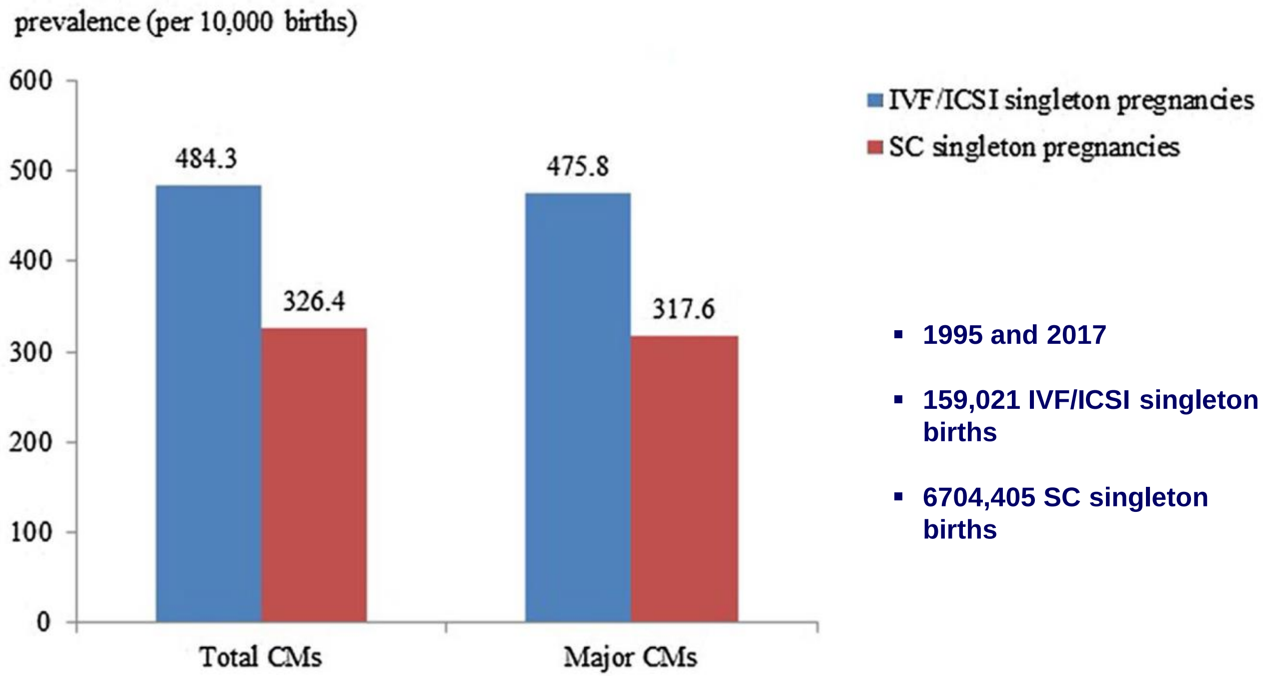
Archives of Gynecology and Obstetrics (2018) 297:1115–1130
https://doi.org/10.1007/s00404-018-4712-x

REVIEW

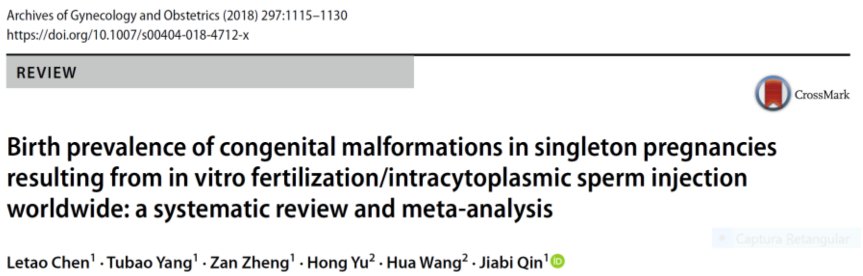
CrossMark

Birth prevalence of congenital malformations in singleton pregnancies resulting from in vitro fertilization/intracytoplasmic sperm injection worldwide: a systematic review and meta-analysis

Letao Chen[1] · Tubao Yang[1] · Zan Zheng[1] · Hong Yu[2] · Hua Wang[2] · Jiabi Qin[1]



- **1995 and 2017**
- **159,021 IVF/ICSI singleton births**
- **6704,405 SC singleton births**



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REVIEW

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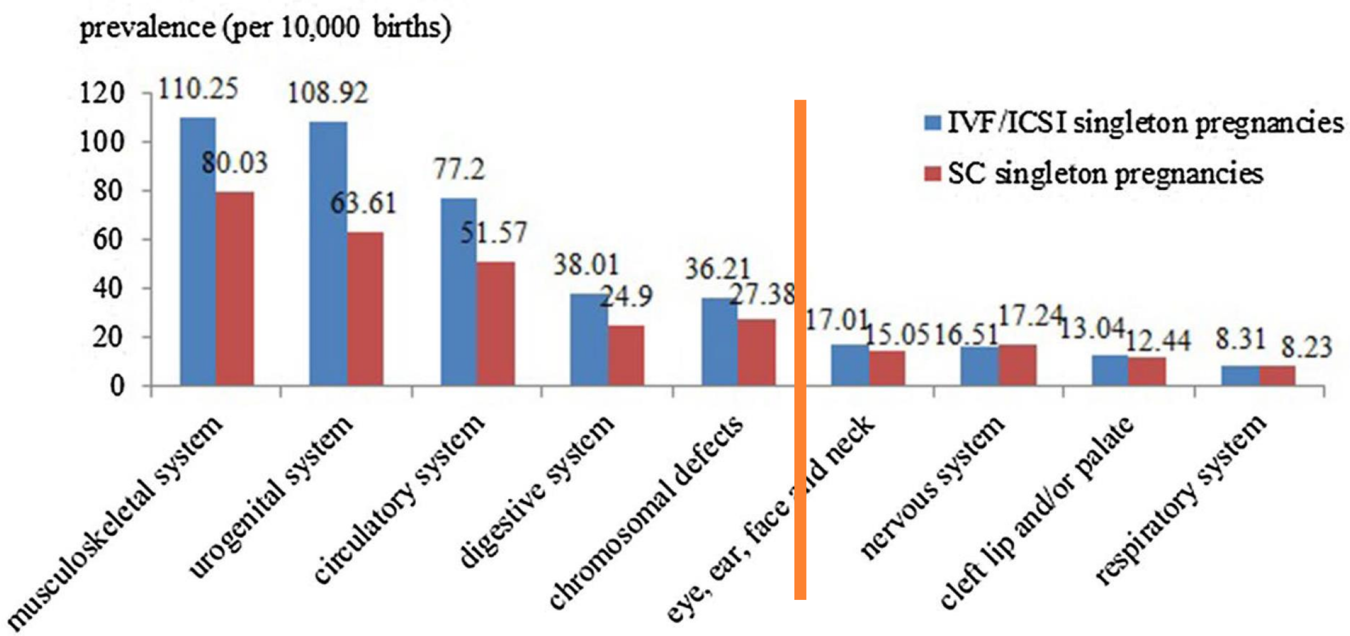

FERTILITY

Human Reproduction Update, Vol.16, No.1 pp. 65–79, 2010
Advanced Access publication on August 20, 2009 doi:10.1093/humupd/dmp027

human
reproduction
update

Paternal age and reproduction

Gideon A. Sartorius[1,2] **and Eberhard Nieschlag**[1,3]

[1]Centre of Reproductive Medicine and Andrology of the University, Domagkstrasse 11, D-48149 Muenster, Germany [2]Present address:

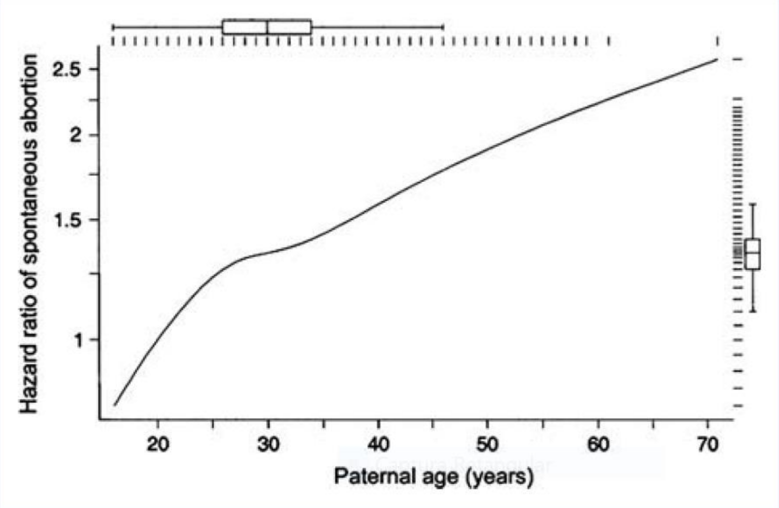

Figure 3 Hazard ratios of spontaneous miscarriages between 6 and 20 weeks according to paternal age adjusted for different confounders including maternal age (using prospective data from 5121 Californian women, men aged 20 years as referent).

Boxplots along the top and right side indicate data distribution according to each axis (with permission from Slama *et al.*, 2005).

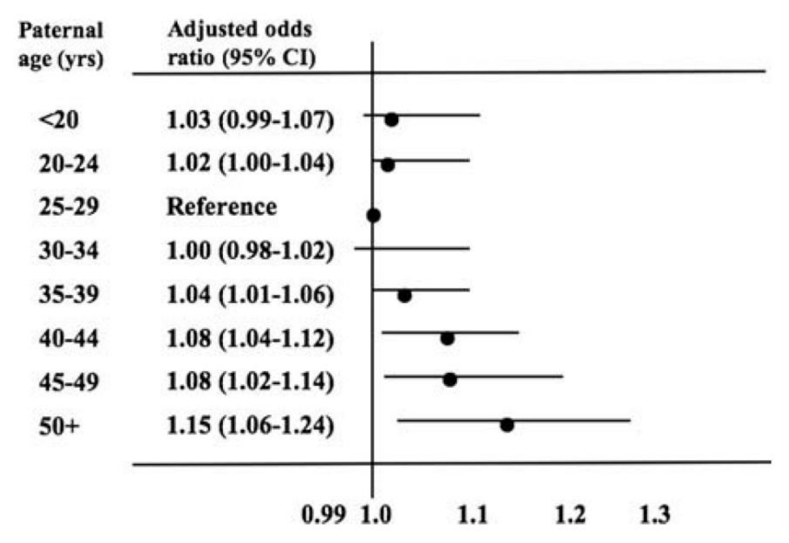

Figure 4 Relative risk of birth defects depending on paternal age.

Retrospective analysis of 5 213 248 subjects in the USA. Increased risk for heart defects, circulatory/respiratory defects, diaphragmatic hernia, tracheo-oesophageal fistulas, musculo-sceletal anomalies (data extracted from Yang *et al.*, 2007).

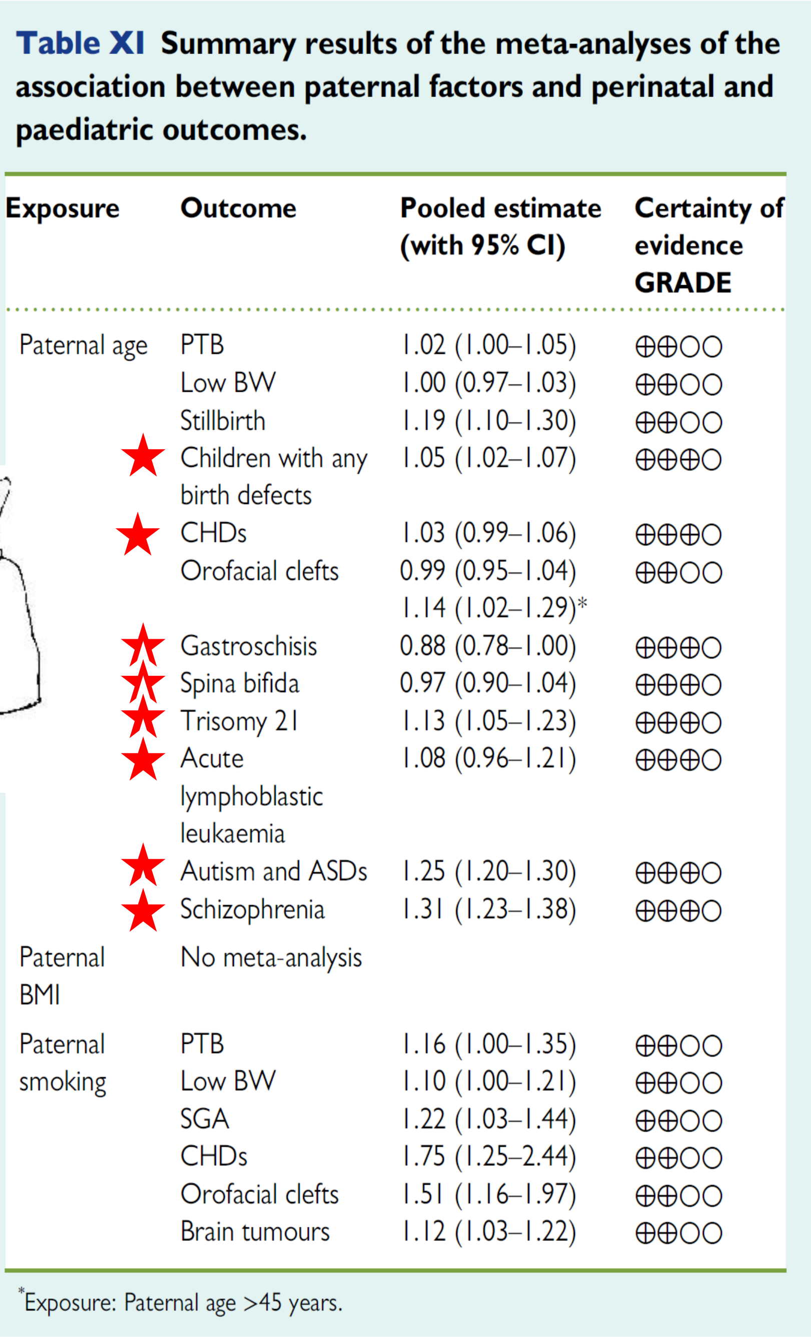

Table XI Summary results of the meta-analyses of the association between paternal factors and perinatal and paediatric outcomes.

Exposure	Outcome	Pooled estimate (with 95% CI)	Certainty of evidence GRADE
Paternal age	PTB	1.02 (1.00–1.05)	⊕⊕○○
	Low BW	1.00 (0.97–1.03)	⊕⊕○○
	Stillbirth	1.19 (1.10–1.30)	⊕⊕○○
	★ Children with any birth defects	1.05 (1.02–1.07)	⊕⊕⊕○
	★ CHDs	1.03 (0.99–1.06)	⊕⊕⊕○
	Orofacial clefts	0.99 (0.95–1.04)	⊕⊕○○
		1.14 (1.02–1.29)*	
	★ Gastroschisis	0.88 (0.78–1.00)	⊕⊕⊕○
	★ Spina bifida	0.97 (0.90–1.04)	⊕⊕⊕○
	★ Trisomy 21	1.13 (1.05–1.23)	⊕⊕⊕○
	★ Acute lymphoblastic leukaemia	1.08 (0.96–1.21)	⊕⊕⊕○
	★ Autism and ASDs	1.25 (1.20–1.30)	⊕⊕⊕○
	★ Schizophrenia	1.31 (1.23–1.38)	⊕⊕⊕○
Paternal BMI	No meta-analysis		
Paternal smoking	PTB	1.16 (1.00–1.35)	⊕⊕○○
	Low BW	1.10 (1.00–1.21)	⊕⊕○○
	SGA	1.22 (1.03–1.44)	⊕⊕○○
	CHDs	1.75 (1.25–2.44)	⊕⊕○○
	Orofacial clefts	1.51 (1.16–1.97)	⊕⊕○○
	Brain tumours	1.12 (1.03–1.22)	⊕⊕○○

*Exposure: Paternal age >45 years.

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Obrigado!

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