AVALIAÇÃO DA INFERTILIDADE & PROGNÓSTICO

Dr. Eduardo Pandolfi Passos

AVALIAÇÃO DA INFERTILIDADE E PROGNÓSTICO

- ✓ AVALIAÇÃO DA NECESSIDADE DE TRATAMENTO DA INFERTILIDADE
  - Modelos preditivos
  - Indicações
- ✓ INFLUÊNCIA DO ESTILO DE VIDA NA FERTILIDADE NATURAL E RA
  - Fumo
  - Álcool
  - Massa corporal
- ✓ PROGNÓSTICO DE PROVÁVEL SUCESSO APÓS RA
  - Idade
  - IMC
  - Causas
  - Resposta ovariana
  - Técnica e lab

AVALIAÇÃO DA NECESSIDADE DE TRATAMENTO DA INFERTILIDADE

Bhattacharya, 2010

- ✓ **Subfertilidade – sintomas x doença**
- ✓ **Definição baseada em estimativas de gestar**
- ✓ **Testes não são discriminatórios**

A taxa de gestação, em 12 meses, considerando um casal normal é:

1 – 25 %

2 – 80%

3 – 60 %

A taxa de gestação, em 12 meses, considerando um casal normal é:

1 – 25 %

2 – 80%

3 – 60 %

Human Reproduction, Vol. 14, No. 5, 1250-1254, May 1999

Regional differences in waiting time to pregnancy: pregnancy-based surveys from Denmark, France, Germany, Italy and Sweden

s. Juul[1], W. Karmaus[2], J. Olsen[3] and The European Infertility Subfecundity Study Group[*]

[1] Department of Epidemiology and Social Medicine, Vennelyst Boulevard 6, DK-8000 Aarhus C, Denmark,
[2] Nordig Institute for Health Research and Prevention, Altc Kollaustrasse 32a, D-Z000 Hamburg 54, Germany and
[3] Danish Epidemiology Science Centre at Department of Epidemiology and Social Medicine, Vennelyst Boulevard 6, DK-8000 Aarhaus, Denmark

Taxa cumulativa de gestação

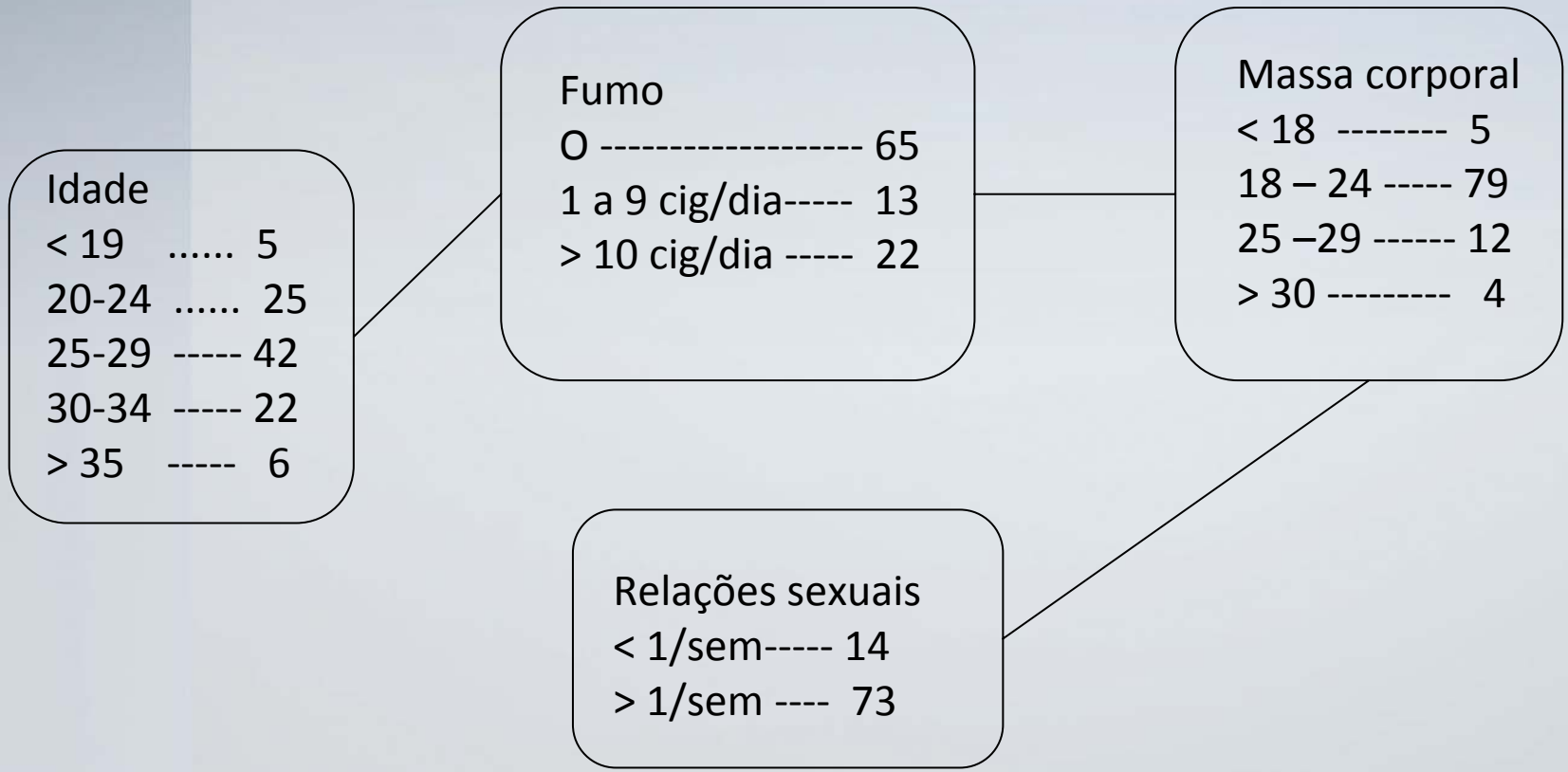
Meses	total
≤ 3	54,5
≤ 6	71,3
≤ 12	80,8

Panorama UIT 2010 Updates in Infertility Treatment

Human Reproduction, Vol. 14, No. 5, 1250-1254, May 1999

Regional differences in waiting time to pregnancy: pregnancy-based surveys from Denmark, France, Germany, Italy and Sweden

s. Juul[1,4], W. Karmaus[2], J. Olsen[3] and The European Infertility Subfecundity Study Group,



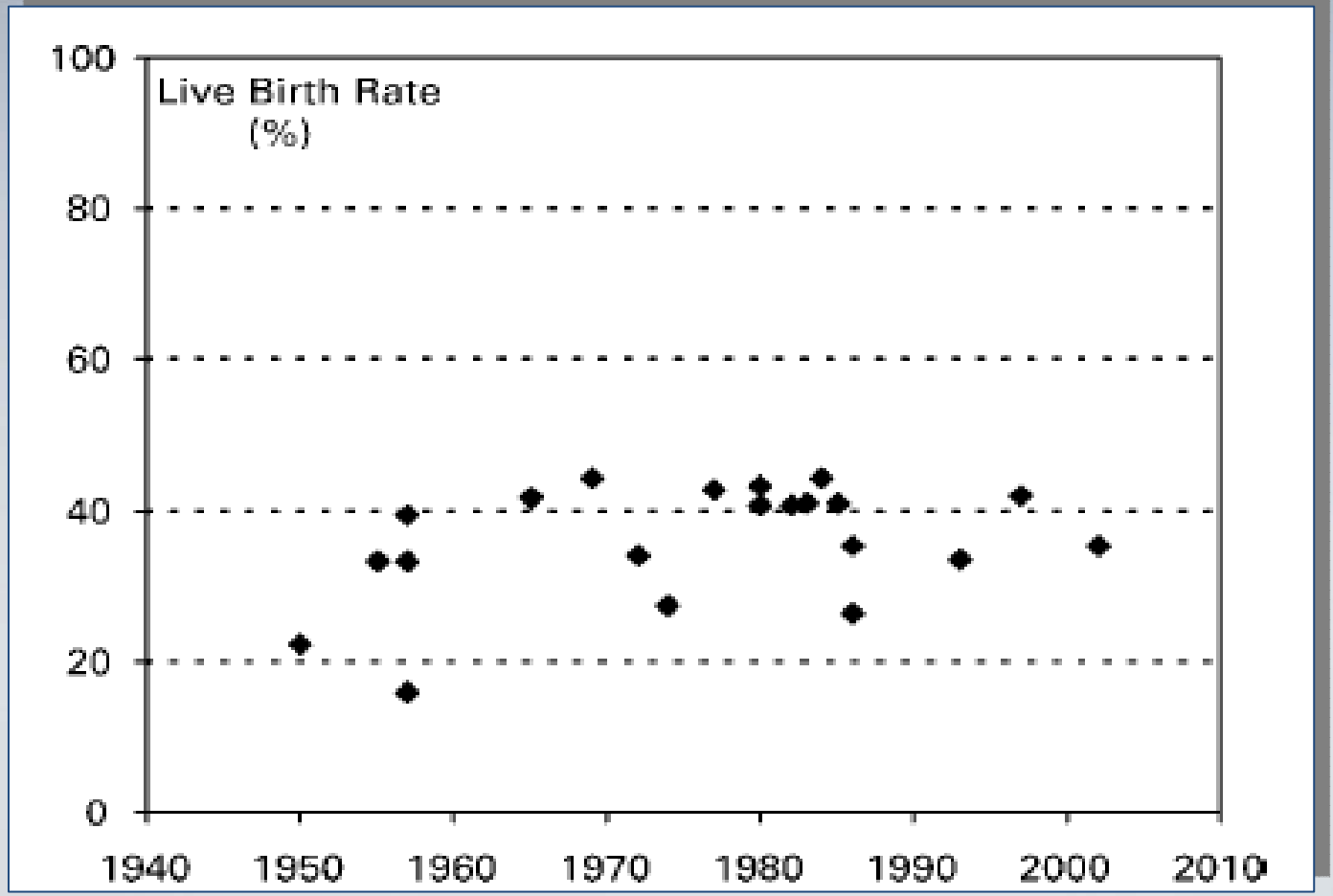
Human Reproduction Update, Vol.10, No.4 pp. 309–316, 2004
Advance Access publication June 10, 2004.
doi:10.1093/humupd/dmh029

Overall prognosis with current treatment of infertility

John A.Collins[1,3] and André Van Steirteghem[2]

[1]McMaster University, Hamilton, Ontario and Dalhousie University, Halifax, Nova Scotia, Canada and [2]Brussels Free University, Laarbeeklaan 101, Brussels, Belgium

Frank, 1950
Turner, 1955
Horne, 1957
Southam, 1957
Sloan, 1964
Raymont, 1969
Lamb, 1980
Newton, 1974
Dor, 1977
Harrison, 1980
Sorensen, 1980
Thomas, 1980
West, 1982
Verkauf, 1983
Kliger, 1984
Hull, 1985
Collins, 1986
Sundstrom, 1997
Snick, 1997
Che, 2002



14460 casais – 1950 -2003

Table I. Distribution of infertility diagnosis groupings

Diagnostic category	% of couples	% not treated
Ovulatory disorders		
Amenorrhoea	2.3	9.8
Oligo-ovulation	16.6	18.0
Hyperprolactinaemia	2.9	25.3
Pelvic disorders		
Tubal obstruction	7.7	24.2
Other tubal defect	10.8	29.1
Endometriosis stages I and II	3.2	23.8
Endometriosis stages III and IV	1.8	21.0
Male disorders		
Azoospermia	7.1	25.2
Oligozoospermia	16.8	50.1
Unexplained infertility	30.7	68.6

Table II. Treatment options according to major infertility diagnoses

Diagnostic group	Treatment choices
Ovulations disorder	Clomiphene citrate (6 cycles) Gonadotrophins (3 cycles) Metformin + clomiphene (3 cycles) Laparoscopic ovarian diathermy IVF (3 cycles)
Tubal disease	Tubal surgery IVF (3 cycles)
Endometriosis	Laparoscopic ablation for stages I and II Surgery for stages III and IV Clomiphene citrate and IUI (6 cycles) Gonadotrophins and IUI (3 cycles) IVF cycles (3 cycles)
Male infertility	IUI, partner (6 cycles) Donor insemination (6 cycles) IVF and ICSI (3 cycles)
Unexplained infertility	Clomiphene citrate and IUI (6 cycles) Gonadotrophins and IUI (3 cycles) IVF (3 cycles)

Table IV. Non-assisted reproduction technology (ART) treatment effects

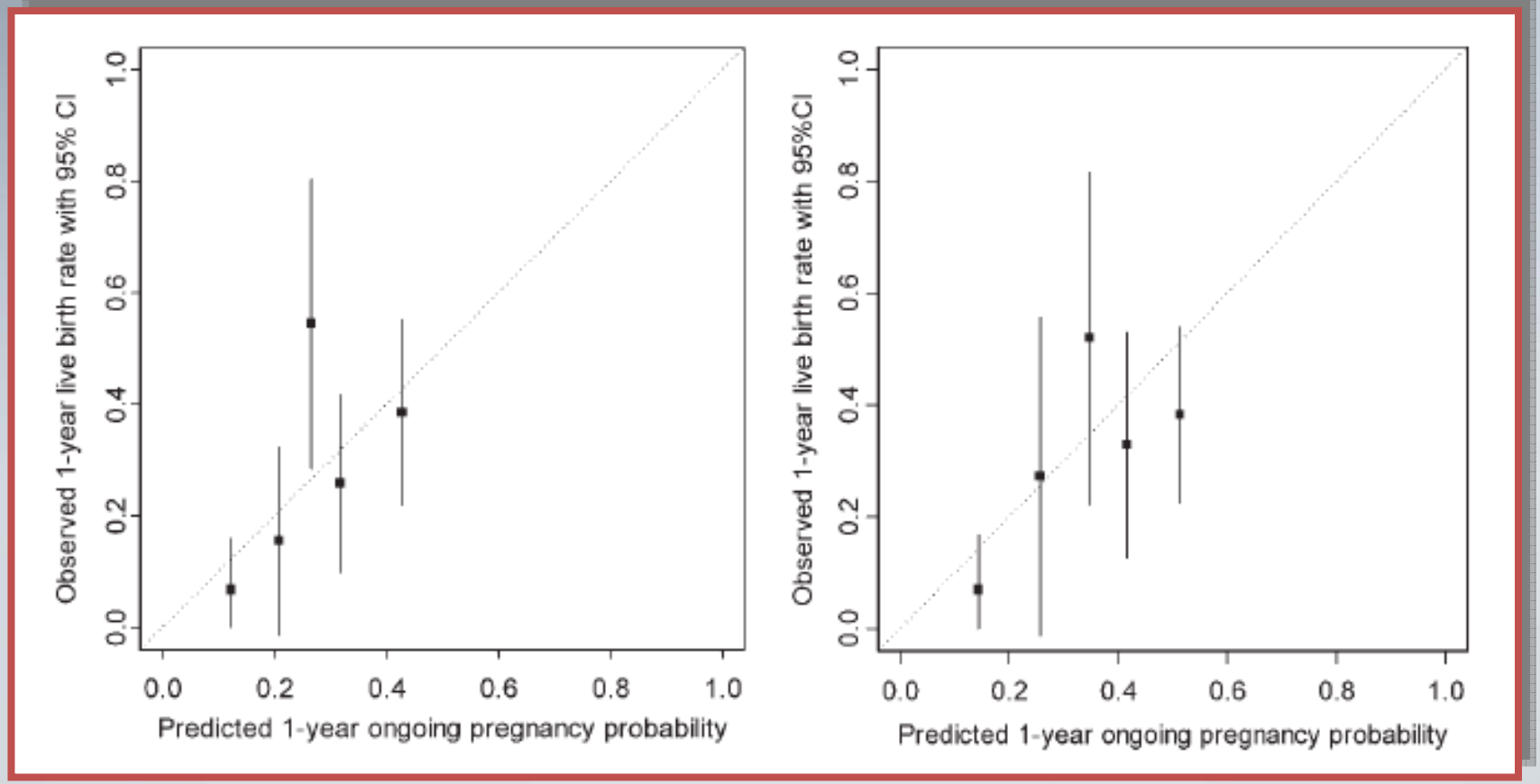
Diagnostic group (%)	Treatments (unit)	Live birth rate (%)	Multiple birth rate (%)	References
Amenorrhoea	No treatment (3 years)	6	1	Hughes *et al.*, 2000
	Clomiphene citrate (cycle)	19	10	Imani et al., 1999; Hughes et al., 2000
	Gonadotrophins (cycle)	21	10	Caspi et al., 1974; Ellis and Williamson, 1975; Lunenfeld et al., 1981; Fluker et al., 1994
	Metformin + clomiphene (cycle)	11	10	Lord et al., 2003
Oligomenorrhoea	No treatment (3 years)	46	1	Collins et al., 1995; Hughes et al., 2000
	Clomiphene citrate (cycle)	9	10	Imani et al., 1999; Hughes et al., 2000
	Gonadotrophins (cycle)	21	15	Caspi et al., 1974; Ellis and Williamson, 1975; Lunenfeld et al., 1981; Fluker et al., 1994
	Metformin + clomiphene (cycle)	11	10	Lord et al., 2003
	Ovarian diathermy (1 year)	38	1	Farquhar et al., 2002
Hyperprolactinaemia	No treatment (3 years)	30	1	Schlecte et al., 1989; Collins et al., 1995; Touraine et al., 2001
	Bromocriptine (1 year)	31	1	Touraine et al., 2001
Tubal obstruction	No treatment (3 years)	5	1	Collins et al., 1993, 1995; Snick et al., 1997
	Tubal surgery (1 year)	18	1	Adamson and Baker, 2003
Other tubal disease	No treatment (3 years)	22	1	Collins et al., 1995; Snick et al., 1997
	Tubal surgery (1 year)	28	1	Granberg et al., 2003
	Gonadotrophins + IUI (cycle)	8	30	Guzick et al., 1999
Endometriosis stages I and II	No treatment (3 years)	25	1	Collins et al., 1995; Snick et al., 1997
	Laparoscopic ablation (1 year)	18	1	Marcoux et al., 1997; Parazzini and Gruppo Italiano per lo Studio dell'Endometriosi, 1999
	Clomiphene citrate + IUI (cycles)	5	10	Fox et al., 1991; ASRM Practice Committee, 2000
	Gonadotrophins + IUI (cycle)	8	30	Guzick et al., 1999
Endometriosis stages III and IV	No treatment (3 years)	10	1	Collins et al., 1995; Snick et al., 1997
	Surgery (1 year)	30	1	Adamson et al., 1993
	Gonadotrophins + IUI (cycle)	8	30	Guzick et al., 1999
Azoospermia	No treatment (3 years)	5	1	Collins et al., 1995; Snick et al., 1997
	Donor insemination (cycle)	13	1	Byrd et al., 1990; Odem et al., 1991; Patton et al., 1992; Robinson et al., 1992; Subak et al., 1992
Oligozoospermia	No treatment (3 years)	32	1	Collins et al., 1995; Snick et al., 1997
	IUI (cycle)	5	10	Kirby et al., 1991; Guzick et al., 1999
	Gonadotrophins + IUI (cycle)	5	30	Guzick et al., 1999
Unexplained infertility	No treatment (3 years)	36	1	Collins et al., 1995; Snick et al., 1997
	Clomiphene citrate + IUI (cycle)	5	10	Harrison and O'Moore, 1983; Fisch et al., 1989; Deaton et al., 1990; Glazener et al., 1990
	Gonadotrophins + IUI (cycle)	8	30	Guzick et al., 1999

Human Reproduction Vol.20, No.6 pp. 1636–1641, 2005
doi:10.1093/humrep/deh821
Advance Access publication March 10, 2005

Prospective validation of two models predicting pregnancy leading to live birth among untreated subfertile couples

Claudine C.Hunault[1,4], Joop S.E.Laven[2], Ilse A.J.van Rooij[3], Marinus J.C.Eijkemans[1], Egbert R.te Velde[3] and J.Dik F.Habbema[1]

Indicações de ART em casos de muito baixo prognóstico


Observed 1-year live birth rate with 95% CI
0.0
0.2
0.4
0.6
0.8
1.0
Predicted 1-year ongoing pregnancy probability
Observed 1-year live birth rate with 95%CI
0.0
0.2
0.4
0.6
0.8
1.0
Predicted 1-year ongoing pregnancy probability

Human Reproduction Vol.19, No.9 pp. 2019–2026, 2004
Advance Access publication June 10, 2004

DOI: 10.1093/humrep/deh365

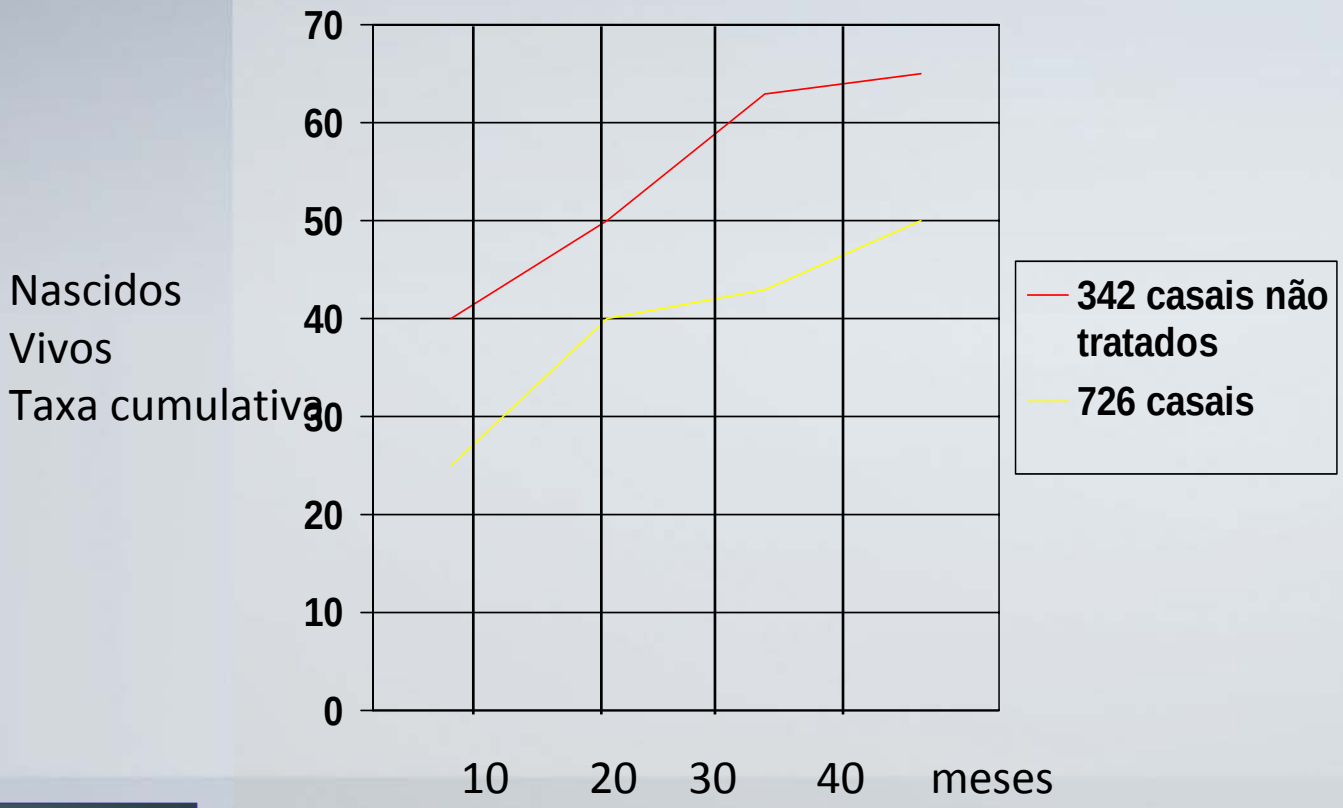
Two new prediction rules for spontaneous pregnancy leading to live birth among subfertile couples, based on the synthesis of three previous models

C.C.Hunault[1,5], J.D.F.Habbema[1], M.J.C.Eijkemans[1], J.A.Collins[2], J.L.H.Evers[3] and E.R.te Velde[4]

The spontaneous pregnancy prognosis in untreated subfertile couples: the Walcheren primary care study

HK Snick, TS Snick, JL Evers and JA Collins

Department of Obstetrics and Gynaecology, Ziekenhuis Walcheren, Vlissingen, The Netherlands. **Hum Reprod 1997**



	casais	meses	Nasc vivos	Taxa nasc vivos	Taxa cum nasc. vivos 36 meses
esca	218	3207	122	55,96	60,61
hormonal	188	1021	16	8,51	11,95
oligospermia	218	3719	51	23,39	27,82
azoospermia	33	799	0	0	0
tubário	94	1230	5	5,32	5,95
endometriose	23	349	3	13,04	14,88
cervical	201	3746	24	11,94	29,39
Todos casais	726	9915	201	27,69	52,45

Meses	Prognóstico médio basal de nascidos vivos
3	13,0
6	18,9
12	27,4
24	41,9
36	46,2

HK Snick, TS Snick, JL Evers and JA Collins

Hum Reprod 1997

Efeito do fator prognóstico
expresso em fator de multiplicação do prognóstico basal

4 variáveis

Infertilidade<24 meses 1,5
Defeito ovulatório.....0,4
Defeito imunológico..... 0,3
Defeito tubário..... 0,1

6 variáveis

Gravidez anterior.....1,5
Infertilidade < 24 meses..... 1,5
Idade mulher < 30 anos 1,4
Defeito masculino 0,6
Defeito ovulatório.....0,4
Defeito tubário.....0,1

Prognóstico de nascidos vivos após 3 a 36 meses

Average baseline prognosis of live birth (ABPLB)
Effect of prognostic factors expressed in multiplication factor (MF)

Live birth rate prognosis after 3 to 36 months = **ABPLB x MF(s)**

Panorama UIT 2010 Updates in Infertility Treatment

3	13,0
6	18,9
12	27,4
24	41,9
36	46,2

Prognóstico médio

6 variáveis
Gravidez anterior.....1,5
Infertilidade < 24 meses.....1,5
Idade mulher < 30 anos 1,4
Defeito masculino 0,6
Defeito ovulatório.....0,4
Defeito tubário..... 0,1

Prognóstico para 3 meses em casal com oligospermia, mulher com 28 anos

13,0 x 1,4 x 0,6 = 10,92

Para 6 meses	**18,9 x 1,4 x 0,6 = 15,76**
Para 12 meses	**41,9 x 1,4 x 0,6 = 35,19**

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	0	5	10	15
idade	<30	30-35		> 35
endometriose		leve		grave
tubária			leve	grave
masculino		leve		grave
imunológico		x		
esca	x			

6 ciclos até 5
3 ciclos até 10
FIV ≥ 15

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INFLUÊNCIA DO ESTILO DE VIDA NA FERTILIDADE NATURAL E TRA

Legro, 2010

- ✓ Obesidade associada a falha reprodutiva
- ✓ Obesidade comum em SOP
- ✓ Perda de peso como primeira orientação
- ✓ Eficácia da perda de peso

Optimizing natural fertility in couples planning pregnancy

Mark D Hornstein, William E Gibbons

Last literature review for version 17.3: September 30th, 2009 | This topic last updated: Agosto 13, 2009

- ✓ There are no large-scale, randomized, clinical trials examining the effect of lifestyle issues such as cigarette smoking, body mass index, stress, or alcohol or caffeine consumption on fertility.

- ✓ Most studies are observational and subject to many potential biases.

Human Reproduction, Vol.25, No.3 pp. 578–583, 2010
Advanced Access publication on January 18, 2010 doi:10.1093/humrep/dep458

human reproduction

ESHRE PAGES

Lifestyle-related factors and access to medically assisted reproduction†

ESHRE Task Force on Ethics and Law, including W. Dondorp[1], G. de Wert, G. Pennings, F. Shenfield, P. Devroey, B. Tarlatzis, and P. Barri

Department of Health, Ethics and Society, Research Institutes CAPHRI and GROW, Maastricht University, Maastricht, The Netherlands

[1]Correspondence address. E-mail: w.dondorp@hes.unimaas.nl

OBESIDADE = IMC >30

- ✓ Obesidade – SOP – resistência insulínica
- ✓ Homem = ↓ testosterona
  - ↑ temp bolsa escrotal
  - ↑ disfunção erétil
- ✓ RA : ↑ drogas indutoras
  - ↓ taxa gestação
  - ↑ taxa de aborto

OBESIDADE = IMC >30

Gestação : Pré-eclâmpsia

Diabete

Tromboembolismo

TPP

Defeitos congênitos

tubo neural

cardiovascular

Em pacientes obesas, a perda de peso antes da FIV:

1 – é recomendável somente em pacientes jovens

2 – é obrigatória

3 – é recomendável somente em pacientes jovens e que não pretendem fazer FIV imediatamente

Em pacientes obesas, a perda de peso antes da FIV:

1 – é recomendável somente em pacientes jovens

2 – é obrigatória

3 – é recomendável somente em pacientes jovens e que não pretendem fazer FIV imediatamente

Effect of a very-low-calorie diet on in vitro fertilization outcomes

A low-calorie diet in a group of overweight or obese patients for a short period before and during IVF results in variable tolerance to the dietary regime and an unsatisfactory IVF outcome. (Fertil Steril® 2006;86:227–9. ©2006 by American Society for Reproductive Medicine.)

Victoria Tsagareli, M.D.[a]
Manny Noakes, Ph.D.[b]
Robert J. Norman, M.D.[a]
[a] *The University of Adelaide, Research Centre for Reproductive Health, Faculty of Health Sciences, Department of Obstetrics and Gynaecology, Adelaide, Australia; and* [b] *CSIRO Health Sciences and Nutrition, Adelaide, Australia*

CIGARRO

- ✓ alteração na formação dos gametas
- ✓ melhora após um ano de parada
- ✓ RA: 2 vezes mais tentativas
- ✓ Gestação: aborto, RCIU, TPP, morte neonatal
- ✓ RN: lábio leporino, morte súbita, alt respiratória

ÁLCOOL

- ✓ Teratogênico
- ✓ Consumo associado com infertilidade
- ✓ RA: diminui resultado
  qualidade oocitária
  menor taxa de implantação
  maior abortamento
- ✓ Gestação : abortamento
  morte fetal
  RCIU

- ✓ discutir RA em mulheres que bebem 2 drinks / dia

- ✓ estimular perda de peso e interromper hábitos de fumar leva tempo e, portanto, limitado às mulheres jovens

PROGNÓSTICO DE PROVÁVEL SUCESSO APÓS TRA

Idade da mulher
Massa corporal
Cigarro

Causas de Infertilidade

Tipos de Indução
Resposta ovariana

Punção
Meio de cultivo
Equipamento
Ambiente lab

Transfer
Suplementação Prog/HCG

O mais importante fator preditivo de gestação é:

1 – idade

2 – IMC

3 – uso de álcool

O mais importante fator preditivo de gestação é:

1 – idade

2 – IMC

3 – uso de álcool

- **Idade da mulher**
- **Massa corporal**
- **Cigarro**

Causas de Infertilidade

Tipos de Indução
Resposta ovariana

Punção
Meio de cultivo
Equipamento
Ambiente lab

Transfer
Suplementação Prog/HCG

Human Reproduction, Vol 9, 1852-1858, 1994

Spontaneous ovulatory cycle donor insemination programme: prognostic indicators of a successful pregnancy

N Ahmed Ebbiary, K Martin, A Gibbs, Y D'arcy, M Afnan and JR Newton
Academic Department of Obstetrics and Gynaecology, Birmingham Maternity Hospital, Edgbaston, UK.

1001 ciclos espontâneos

Taxa de gestação/mês : 4,4%

Taxa cumulativa de gestação após 9 ciclos 45%

Idade da mulher associada a menor chance de sucesso

Female aging and superovulation induction for IVF.

Kim, S H.

Journal of Obstetrics & Gynaecology. 21(1):75-82, 1995 Feb.

The success of in vitro fertilization (IVF) has been reported to be adversely affected by increasing women's age

Retrospective analysis of 1217 IVF cycles in women aged 40 years and older.

Tsafrir, A. Simon, A. Revel, A. Reubinoff, B. Lewin, A. Laufer, N

Reproductive Biomedicine Online. 14(3):348-55, 2007 Mar.

381 women underwent 1217 initiated treatment cycles.

Success rates declined with each year after age 40;

pregnancy and delivery rates:

13.9 and 9.1% at age 40

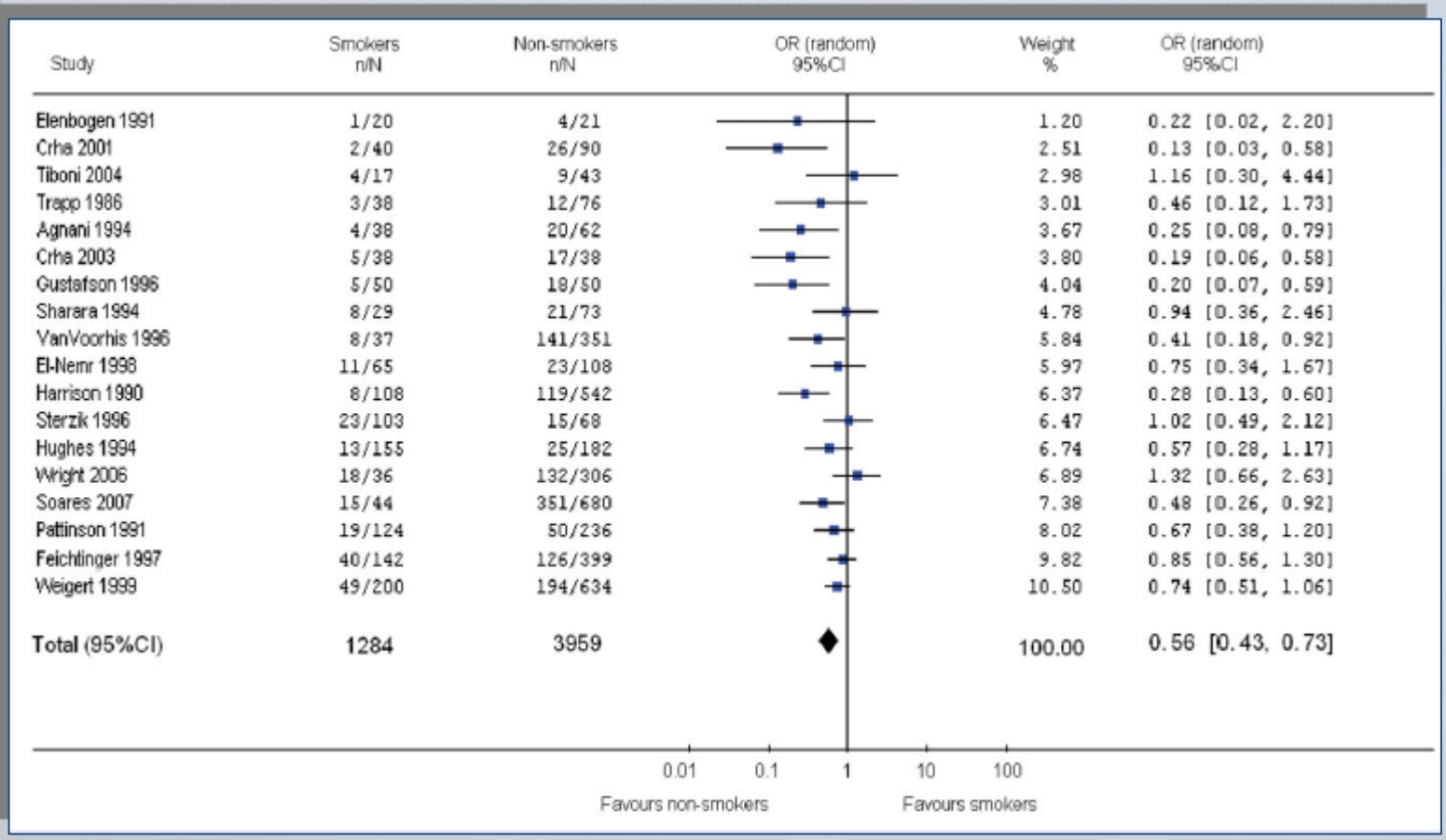
2.8 and 0.7% at age 45

There were no deliveries at an older age.

Effects of cigarette smoking upon clinical outcomes of assisted reproduction: a meta-analysis

A.L. Waylen[1,6], M. Metwally[2], G.L. Jones[3], A.J. Wilkinson[4], and W.L. Ledger[5]

Human Reproduction Update, Vol.15, No.1 pp. 31–44, 2009



Idade da mulher
Massa corporal
Cigarro

✓**Causas de Infertilidade**

- ✓ **Endometriose**
- ✓ **PCOS**
- ✓ **Fator masculino**
- ✓ **Hidrossalpinge**

Tipos de Indução
Resposta ovariana

Punção
Meio de cultivo
Equipamento
Ambiente lab

Transfer
Suporte
Progesterona pos punção

Aspirina
Metformina

Panorama UIT 2010
Updates in Infertility Treatment

Human Reproduction, Vol.24, No.3 pp. 496–501, 2009
Advanced Access publication on December 4, 2008 doi:10.1093/humrep/den398

human reproduction

OPINION

Management of endometriomas in women requiring IVF: to touch or not to touch

Juan A. Garcia-Velasco[1,*] and Edgardo Somigliana[2]

[1]IVI Madrid, Rey Juan Carlos University, Av. del Talgo 68, Madrid 28023, Spain [2]Infertility Unit, Ospedale Maggiore Policlinico, Mangiagalli and Regina Elena, Milan, Italy

☑ **Repensar a intervenção sobre o ovário visando futuro reprodutivo**

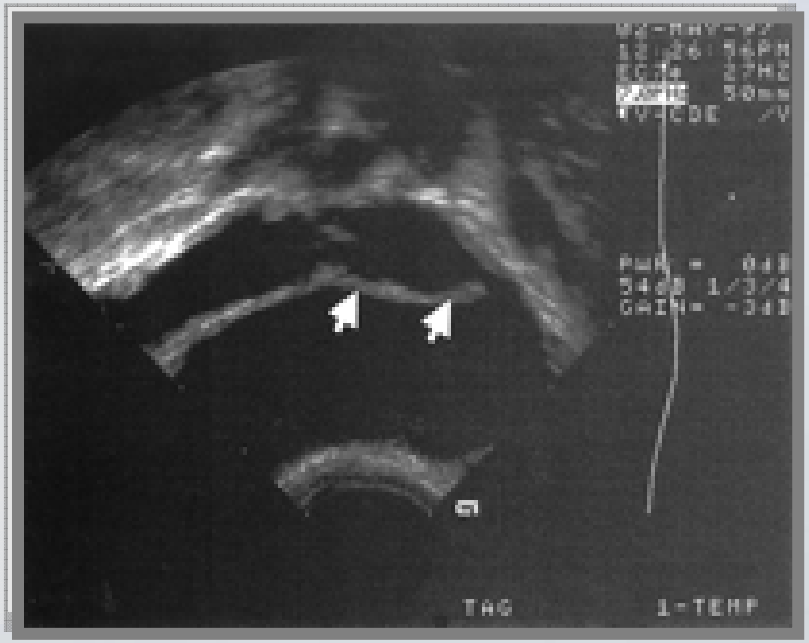
☑ **Individualizar em função da idade da mulher**

Hidrossalpinge

Os estudos randomizados falam a favor de intervenção baseados *sim* no *prejuízo do hidrossalpinge em FIV.*

Strandell et al, 2000
Mansour et al, 2000

Recomendação de atuação quando hidrossalpinge visível ao ultrassom



Idade da mulher
Massa corporal
Cigarro

Causas de Infertilidade

- Tipos de Indução
- Resposta ovariana

Punção
Meio de cultivo
Equipamento
Ambiente lab

Transfer
Suplementação Prog/HCG

Human Reproduction Update, Vol.14, No.1 pp. 1–14, 2008
Advance Access publication November 15, 2007
doi:10.1093/humupd/dmm034

Predictors of ovarian response: progress towards individualized treatment in ovulation induction and ovarian stimulation

B.C.J.M. Fauser[1,4], K. Diedrich[2] and P. Devroey[3] on behalf of the Evian Annual Reproduction (EVAR) Workshop Group 2007

Table 3: r-hFSH dosage nomogram

Measure	r-hFSH score (IU/day)	Score
Total number of follicles ≥10 mm Days 2–5	<15	90
	15–25	60
	>25	50
Total ovarian volume days 2–5 (ml)	<9	90
	9–13	60
	>13	50
Total Doppler score days 2–5	2–3	30
	4	20
	5	10
	6	0
Age (years)	>35	20
	>30–≤35	10
	≤30	0
Smoking habits (cigarettes/day)	>10	20
	≤10	10
	Non-smoker	0
Sum of r-hFSH scores		Starting dose (IU/day)

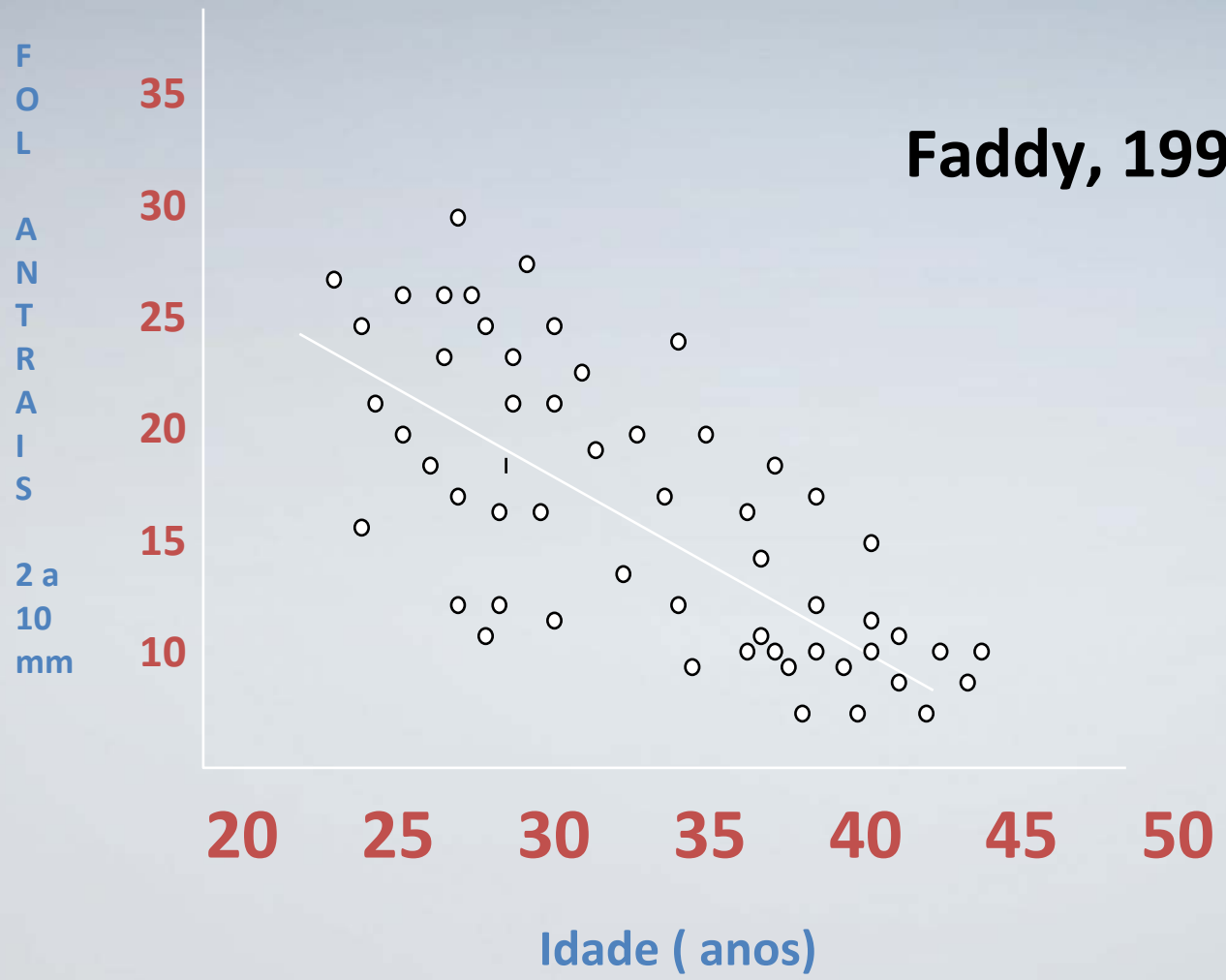
Popovic-Todorovic *et al.* (2003b) by permission of Oxford University Press and the European Society of Human Reproduction and Embryology.

Panorama UIT 2010 Updates in Infertility Treatment

Sueldo, 2003

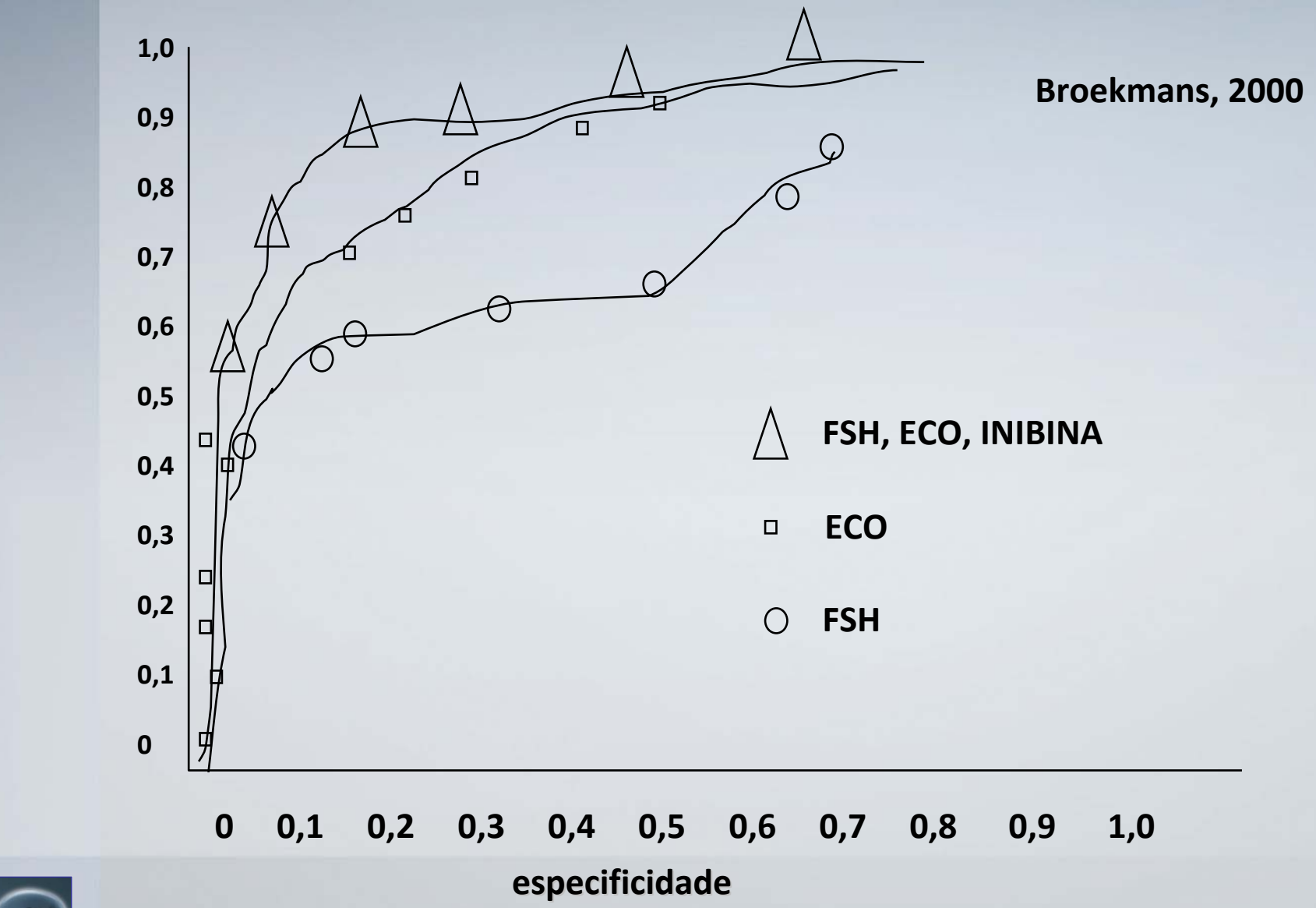
História anterior de má resposta

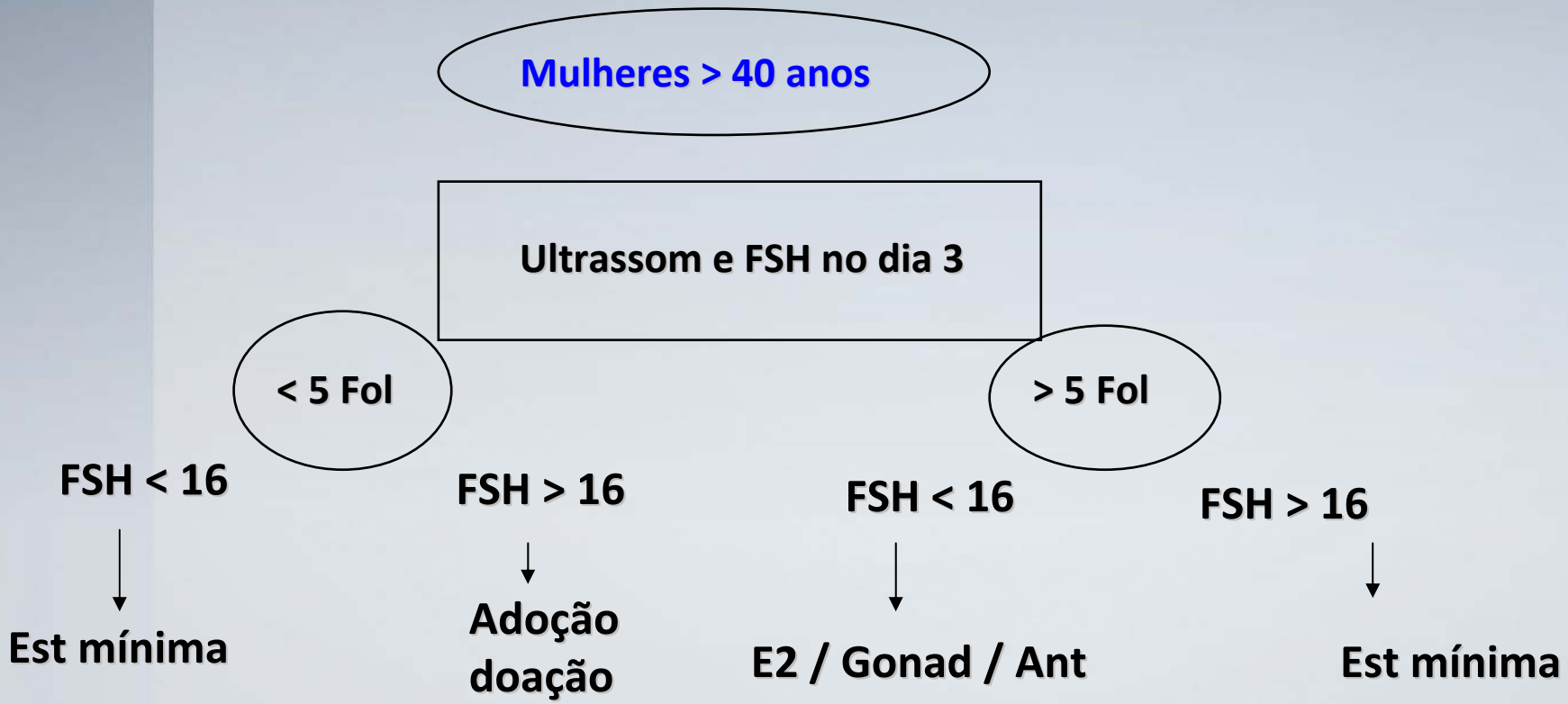
- < 4 folículos
- < 4 oócitos
- < 100 pg/mL E2 após 5 dia de Gonadotrofina
- < 750 pg/mL E2 no dia do HCG


FOL
ANTRAIS
2 a 10 mm
35
30
25
20
15
10
20
25
30
35
40
45
50
Idade (anos)

Faddy, 1992

	Ebrahim 1993	Evers 1998	Bancsi 2000	Sharif 1998
FSH Cut-off	11,5	17	15	10,8
Probabilidade de gestação	8%	5%	4%	10%
Probabilidade de cancelamento	28%	40%	23%	31%


sensibilidade
1,0
0,9
0,8
0,7
0,6
0,5
0,4
0,3
0,2
0,1
0
Broekmans, 2000
FSH, ECO, INIBINA
ECO
FSH
0
0,1
0,2
0,3
0,4
0,5
0,6
0,7
0,8
0,9
1,0
especificidade


Mulheres > 40 anos
Ultrassom e FSH no dia 3
< 5 Fol
> 5 Fol
FSH < 16
Est mínima
FSH > 16
Adoção
doação
FSH < 16
E2 / Gonad / Ant
FSH > 16
Est mínima

Human Reproduction Vol.19, No.1 pp. 3–7, 2004 DOI: 10.1093/humrep/deh028

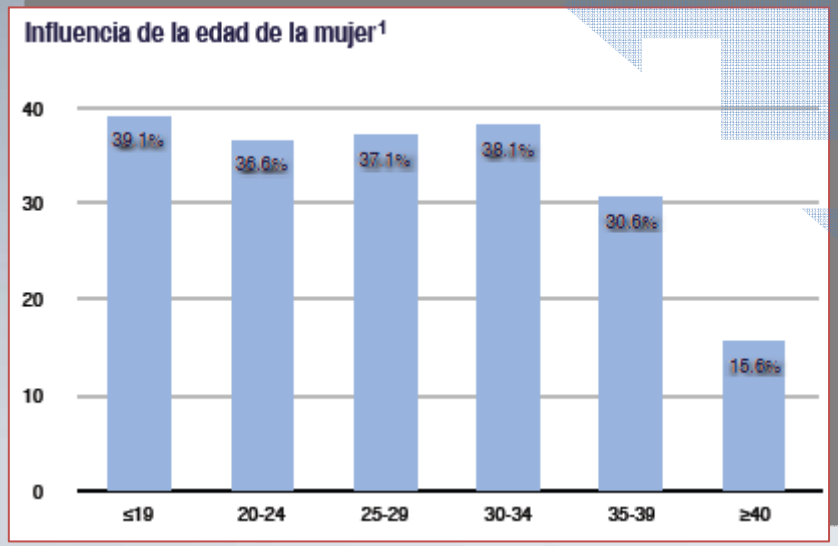
DEBATE

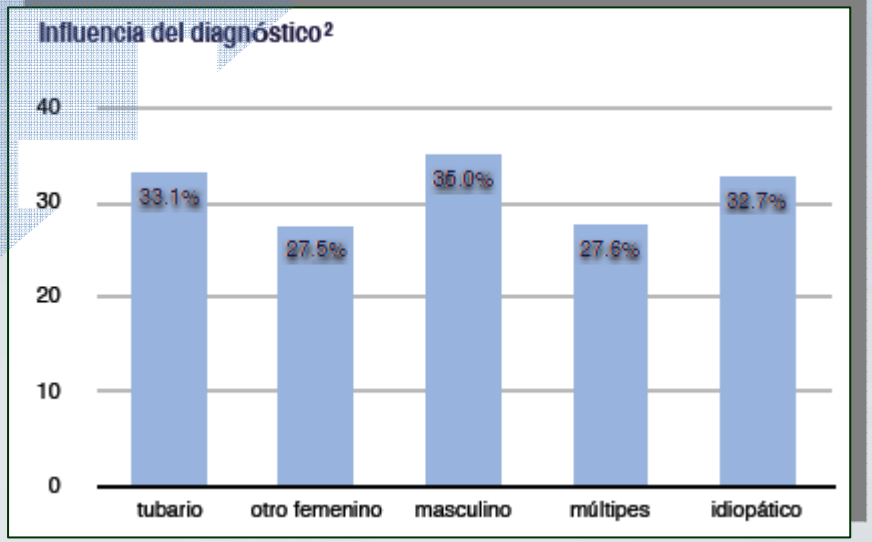
What is the most relevant standard of success in assisted reproduction? The singleton, term gestation, live birth rate per cycle initiated: the BESST endpoint for assisted reproduction

Jason K.Min[1], Sue A.Breheny[2], Vivien MacLachlan[2] and David L.Healy[3,4]

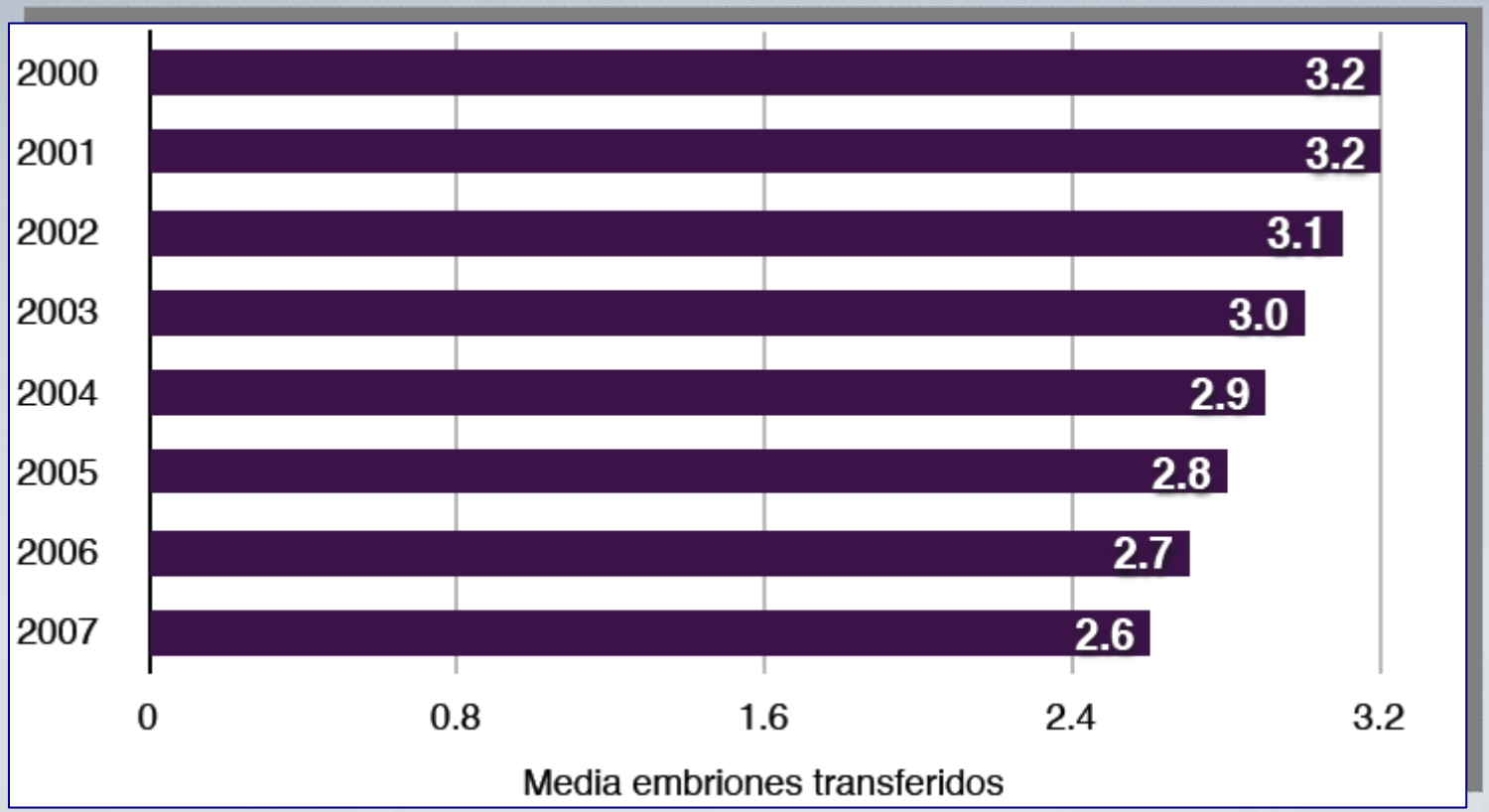
Birth Emphasizing a Successful Singleton at Term

Categoría etaria	Numero de embriones transferidos													
	1		2		3		4		5		6		Total	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%
≤34	748	7.9%	3743	39.7%	3,722	39.5%	1,059	11.2%	122	1.3%	24	0.3%	9418	100%
35–39	917	11.4%	2,570	31.9%	3,305	41.0%	1,156	14.3%	101	1.3%	15	0.2%	8064	100%
≥40	795	20.9%	936	24.6%	1,166	30.7%	803	21.1%	85	2.2%	18	0.5%	3803	100%
Total	2460	11.6%	7249	34.1%	8,193	38.5%	3,018	14.2%	308	1.4%	57	0.3%	21285	100%


Influencia de la edad de la mujer[1]
40
30
20
10
0
39.1%
36.6%
37.1%
38.1%
30.6%
15.6%
≤19
20-24
25-29
30-34
35-39
≥40


Influencia del diagnóstico[2]
40
30
20
10
0
33.1%
27.5%
35.0%
27.6%
32.7%
tubario
otro femenino
masculino
múltipes
idiopático

Red Latinoamericana de
Reproducción Asistida


2000
2001
2002
2003
2004
2005
2006
2007
3.2
3.2
3.1
3.0
2.9
2.8
2.7
2.6
0
0.8
1.6
2.4
3.2
Media embriones transferidos

Human Reproduction

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Assisted reproductive technology in Europe, 2003. Results generated from European registers by ESHRE

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Table 4: Age dsitribution (years) of women treated with IVF and ICSI in 2003

Country	IVF (%)					ICSI (%)				
	≤29	30–34	35–39	40–44	≥45	≤29	30–34	35–39	40–44	≥45
Austria										
Belgium	22.1	37.5	27.5	12.0	0.7	26.3	34.9	27.2	10.6	0.8
Bulgaria	21.2	42.0	25.9	10.3	0.6	26.3	37.0	27.0	9.3	0.3
Croatia	10.6	34.3	52.9	2.3	0.0	12.3	35.0	51.1	1.7	0.0
Denmark	19.1	35.6	34.2	10.1	1.0	25.1	35.5	30.8	8.0	0.6
Finland	24.5	33.6	32.1	13.4		25.8	33.4	30.8	9.9	
France	13.2	36.1	33.7	16.2	0.8	20.6	39.4	28.4	11.3	0.4
Germany	19.8	36.9	36.0	7.0	0.3	23.5	38.1	32.2	5.9	0.3
Greece	12.6	26.9	39.6	17.3	3.5	14.5	30.7	34.7	15.9	4.3
Hungary	23.0	38.2	26.9	10.5	1.3	28.7	36.5	26.4	7.4	0.9
Iceland	18.5	35.6	37.0	8.9	0.0	25.9	36.7	25.9	11.5	0.0
Ireland	6.9	24.8	48.9	18.8	0.7	12.6	33.7	42.5	10.8	0.4
Italy	11.9	31.4	38.9	15.6	2.2	13.1	30.8	37.2	16.0	2.9
Latvia	30.9	33.0	26.6	7.4	2.1	33.3	40.0	26.7	0.0	0.0
Lithuania	12.2	26.8	24.4	24.4	12.2	10.7	53.6	17.9	17.9	0.0
Macedonia	15.4	35.9	31.3	15.4	2.1	23.1	38.5	25.0	13.5	0.0
Netherlands										
Norway										
Poland	22.6	45.8	22.0	8.2	1.4	21.7	40.7	24.9	10.8	1.9
Portugal	13.5	42.7	36.6	6.9	0.2	21.0	40.2	29.0	9.2	0.6
Russia	27.5	36.3	24.2	10.2	1.8	28.0	33.1	23.7	11.4	3.5
Serbia and Montenegro	10.4	33.5	32.9	16.5	6.7	9.3	22.2	39.3	25.0	4.2
Slovenia[a]	12.8	41.2	33.9	14.4	0.3	20.4	33.7	29.2	16.3	0.1
Spain	7.0	37.5	45.7	9.1	0.7	11.1	40.8	38.4	9.1	0.7
Sweden	13.0	35.4	39.2	12.4	0.0	17.5	36.2	36.4	9.9	0.0
Switzerland	8.7	27.9	39.2	15.7	0.9	11.0	33.2	33.9	11.5	0.4
Ukraine	30.9	38.8	24.5	5.6	0.2	38.4	30.9	23.4	7.3	0.0
UK	11.2	33.5	40.6	13.8	0.9	15.0	36.8	37.5	10.2	0.5
All	16.8	35.2	34.2	12.1		20.6	36.1	31.2	10.8	

Table 5: Number of embryos transferred after IVF and ICSI combined in 2003

Country	All transfers	1 embryo	%	2 embryos	%	3 embryos	%	4+ embryos	%
Austria	4370	493	11.3	2623	60.0	1123	25.7	131	3.0
Belgium	9577	4160	43.4	3999	41.8	1175	12.3	243	2.5
Bulgaria	740	63	8.5	169	22.8	388	52.4	120	16.2
Croatia	1883	165	8.8	1682	89.3	36	1.9	0	0.0
Denmark	7795	1675	21.5	5649	72.5	471	6.0	0	0.0
Finland	3951	1711	43.3	2195	55.6	45	1.1	0	0.0
France	41 573	6485	15.6	23 958	57.6	9907	23.8	1223	2.9
Germany	73 196	8044	11.0	44 344	60.6	20 808	28.4	0	0.0
Greece	7187	795	11.1	1580	22.0	2670	37.2	2142	29.8
Hungary	2345	231	9.9	430	18.3	1247	53.2	437	18.6
Iceland	262	28	10.7	188	71.8	46	17.6	0	0.0
Ireland	1660	99	6.0	1148	69.2	390	23.5	23	1.4
Italy	17 829	2425	13.6	6069	34.0	7842	44.0	1493	8.4
Latvia	102	23	22.5	49	48.0	30	29.4	0	0.0
Lithuania	61	1	1.6	11	18.0	37	60.7	12	19.7
Macedonia	263	74	28.1	74	28.1	82	31.2	33	12.5
Netherlands	12 743								
Norway	4241								
Poland	2712	362	13.3	1679	61.9	628	23.2	43	1.6
Portugal	2287	323	14.1	1240	54.2	655	28.6	69	3.0
Russia	7947	1050	13.2	3108	39.1	2626	33.0	1163	14.6
Serbia and Montenegro	274	48	17.5	76	27.7	107	39.0	43	15.7
Slovenia	1779	465	26.1	1169	65.7	145	8.2	0	0.0
Spain	9849	1129	11.5	4320	43.9	3642	37.0	758	7.7
Sweden	7898	4304	54.5	3584	45.4	10	0.1	0	0.0
Switzerland	2726	328	12.0	1766	64.8	631	23.1	1	0.0
Ukraine	1581	170	10.8	446	28.2	692	43.8	273	17.3
UK	24 295	2014	8.3	19 410	79.9	2871	11.8	0	0.0
All	234 142[a]	36 665	15.7	130 966	55.9	58 304	24.9	8207	3.5

Table 6: Pregnancies and deliveries after IVF in 2003

Country	Cycles	Aspirations	Transfers	Pregnancies	Deliveries	Pregnancies per cycle (%)	Pregnancies per aspiration (%)	Pregnancies per transfer (%)	Deliveries per cycle (%)	Deliveries per aspiration (%)	Deliveries per transfer (%)
Austria	1308										
Belgium		3442	3173	659	237		19.1	20.8		6.9	7.5
Bulgaria	514	488	461	108	60	21.0	22.1	23.4	11.7	12.3	13.0
Croatia	1275	1235	1138	275	215	21.6	22.3	24.2	16.9	17.4	18.9
Denmark	5639	5349	4678	1500	1092	26.6	28.0	32.1	19.4	20.4	23.3
Finland	2669	2592	2342	744	570	27.8	28.7	31.8	21.4	22.0	24.3
France		21 704	18 184	4786	3636		22.1	26.4		16.8	20.0
Germany	34 611	28 154	24 666	7115	4547	20.6	25.3	28.8	13.1	16.2	18.4
Greece	3207	3046	2752	868	567	27.1	28.5	31.5	17.7	18.6	20.6
Hungary	761	692	663	206	173	27.1	29.8	31.1	22.7	25.0	26.1
Iceland		146	133	59	42		40.4	44.4		28.8	31.6
Ireland	1078	1058	982	341	282	31.6	32.2	34.7	26.2	26.7	28.7
Italy	8283	7172	6309	1751	1056	21.1	24.4	27.8	12.7	14.7	16.7
Latvia	94	88	88	26	23	27.7	29.5	29.5	24.5	26.1	26.1
Lithuania	41	41	35	14	6	34.1	34.1	40.0	14.6	14.6	17.1
Macedonia	210	195	155	57	31	27.1	29.2	36.8	14.8	15.9	20.0
Netherlands	9755	8744	7626	2561		26.3	29.3	33.6			
Norway	2805	2683	2436	774	610	27.6	28.8	31.8	21.7	22.7	25.0
Poland	487	452	385	121	103	24.8	26.8	31.4	21.1	22.8	26.8
Portugal	1054	951	869	270	215	25.6	28.4	31.1	20.4	22.6	24.7
Russia	6564	6353	5806	1846	1006	28.1	29.1	31.8	15.3	15.8	17.3
Serbia and Montenegro	164	158	127	33	25	20.1	20.9	26.0	15.2	15.8	19.7
Slovenia	770	717	617	207	159	26.9	28.9	33.5	20.6	22.2	25.8
Spain	3072	2630	2475	862	470	28.1	32.8	34.8	15.3	17.9	19.0
Sweden	4925	4584	4138	1432	1113	29.1	31.2	34.6	22.6	24.3	26.9
Switzerland	934	828	737	224	149	24.0	27.1	30.4	16.0	18.0	20.2
Ukraine	1170	1129	1039	316	251	27.0	28.0	30.4	21.5	22.2	24.2
UK	16 250	14 288	13 034	3919	3443	24.1	27.4	30.1	21.2	24.1	26.4
All		118 919	105 048	31 074			26.1	29.6			

Idade da mulher
Massa corporal
Cigarro

Causas de Infertilidade

Tipos de Indução
Resposta ovariana

Punção
Meio de cultivo
Equipamento
Ambiente lab

Transfer
Suplementação Prog/HCG

Lab Guidelines

REDLARA

ASRM / SART

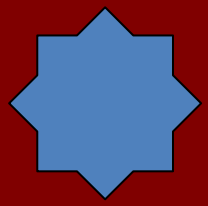
ESHRE

Revised guidelines for good practice in IVF laboratories

M.Cristina Magli, Etienne Van Abbeel, Kersti Lundin, Dominique Royere, Josiane Van der Elst and Luca Gianaroli for Committe of Special Interest Group on Embryology

Hum Reprod 23:1253-1262, 2008

- Ω Profissionais
- Ω Protocolos de condutas
- Ω Segurança do labolatório
- Ω Equipamentos
- Ω Agentes infecciosos
- Ω Meio de cultura



Idade da mulher
Massa corporal
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Fatores ambientais
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Transfer
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Progesterona / HCG

Panorama UIT 2010
Updates in Infertility Treatment

a idade é o melhor marcador

a resposta à indução a maior prova

Panorama
UIT
2010
Updates in Infertility Treatment