Cumulative delivery rates after donor insemination

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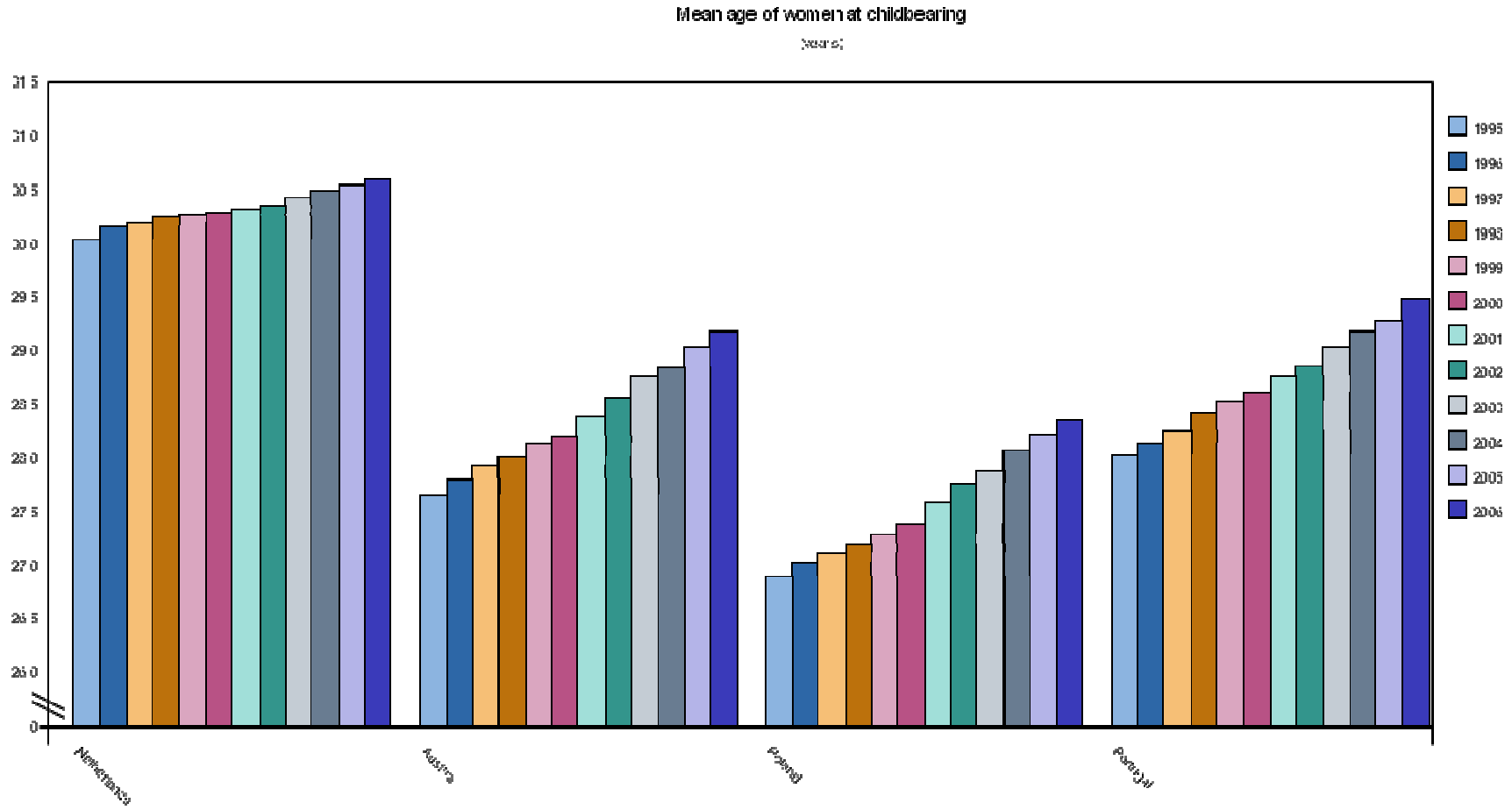

- *Broekmans et al., Female reproductive ageing: current knowledge and future trends, Trends Endocrinol. Metab, 2007*

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Aim of this study:

- Only limited data are available for intrauterine insemination with donor sperm (CECOS, 1982; Barret and Cooke, 1993; Botchan *et al., 2001; Custers et al., 2008; Dovey et al., 2008).*

- We investigated cumulative delivery rates (CDR) after donor insemination and the effect of ...

  age

  indication

  superovulation

Numbers

All these patients started their first donorinsemination cycle between 01 January ’00 and 31 December ‘05

Retrospective analysis of …

- **1654** women
- **6630** insemination cycles

Effect of age

Agegroups	**Number**
All ages	1654 women
20-29 years	331
30-34 years	539
35-37 years	364
38-39 years	197
40- 45 years	223

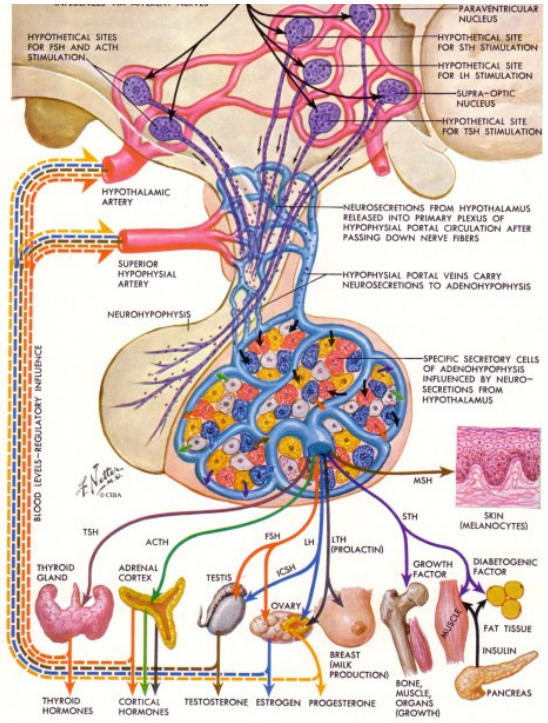
Effect of indication

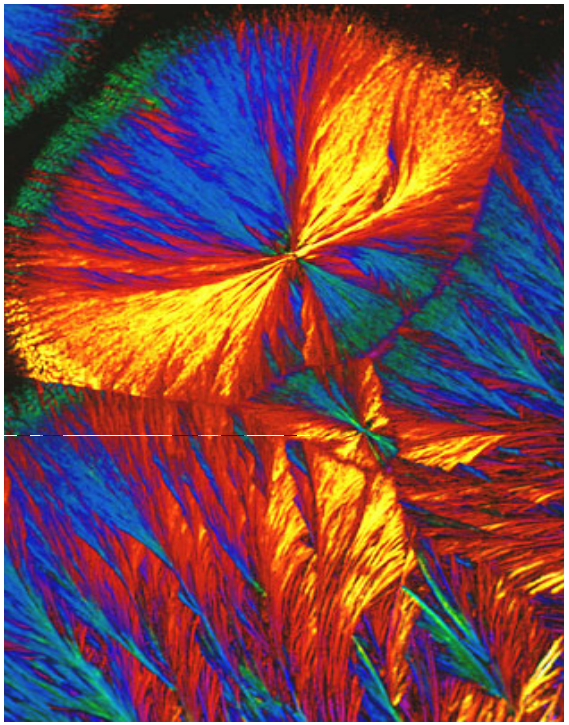
Lesbians

Single-parent request

Male infertility

Effect of superovulation





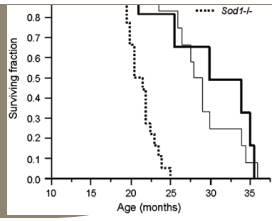
None Clomiphene citrate

Gonadotrophine

Conditions (1)

- IUI with donor sperm
- No delivery in the past.
- Patients were not re-enrolled after a first delivery!
- If a miscarriage occured in one of our patients we calculated each miscarriage as one cycle number, until the patients reached the outcome (delivery at 25 weeks).

Conditions (2)



- Pregnancy follow-up was done by sending questionnaires to patients and their doctor or by telephone queries whenever questionnaires were incomplete

- CDR were calculated with life table analysis.

Life-table analysis: important!

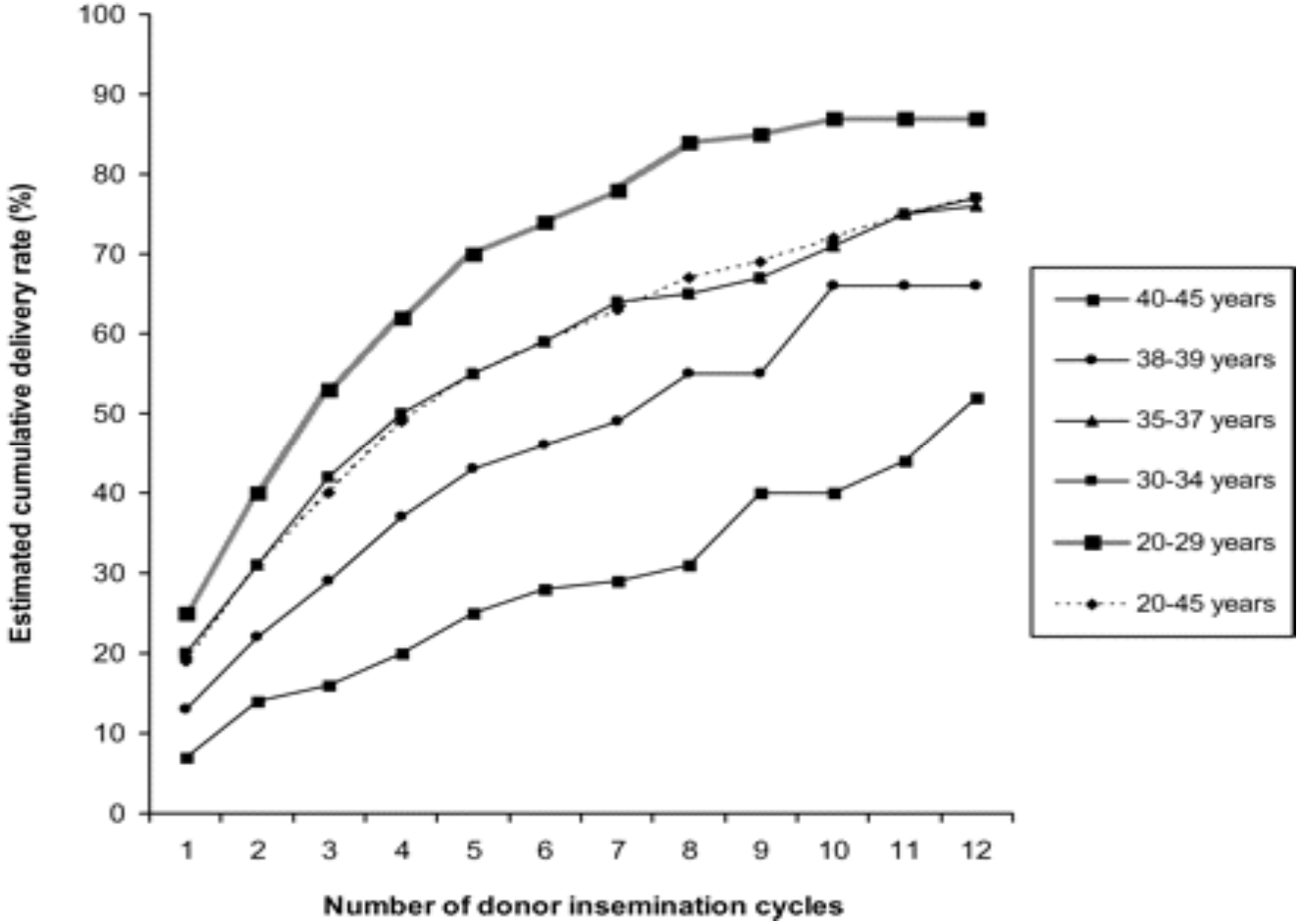
- Patients who stopped treatment due to non-medical reasons were supposed to have the same succesrate as patients who continued treatment.

Results…

Results (1)

- **Significant** effect of age.
- No significant effect of indication.
- No significant effect of superovulation.

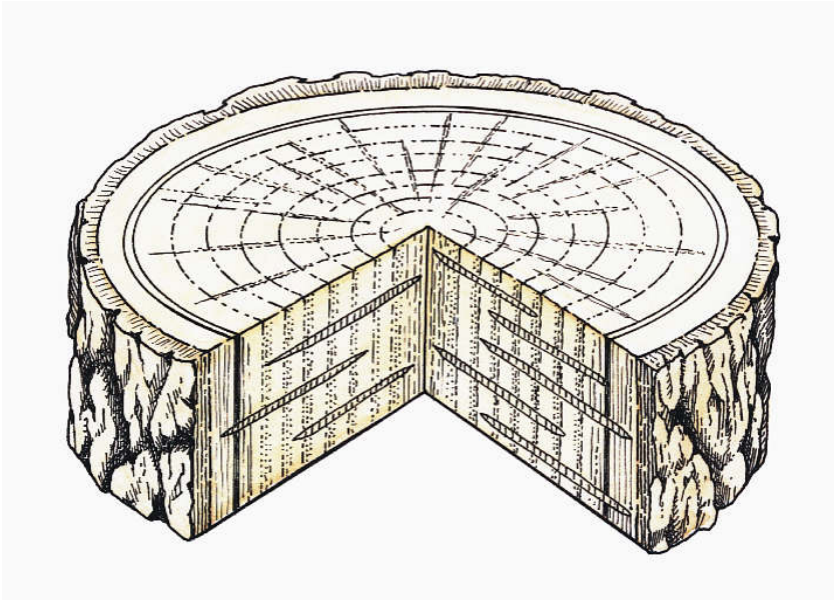
CDR after donorinsemination in 5 pre-specified age groups.



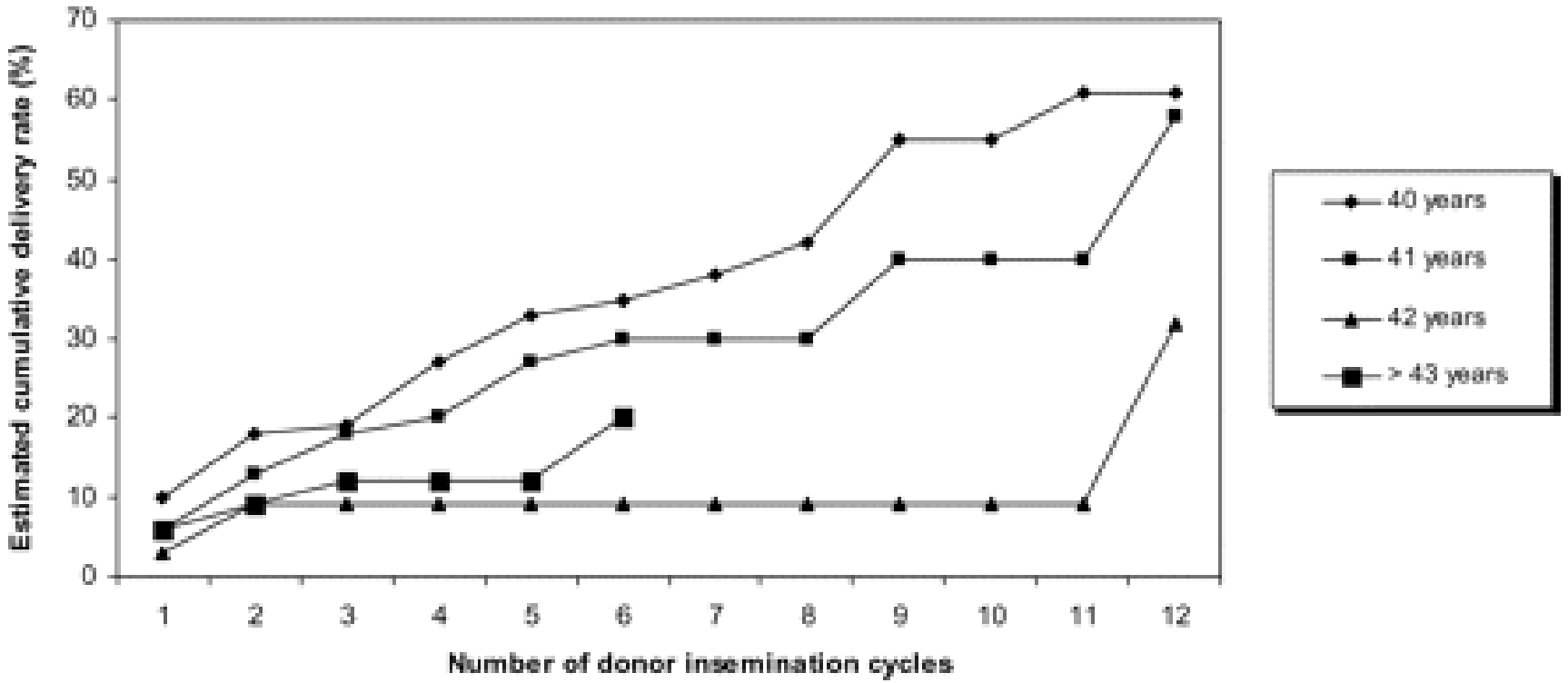
Figuur 2a. Cumulative live birth delivery rates after donor insemination in five pre-specified age groups, i.e. 20–29, 30–34, 35–37, 38–39, 40–45 years and in all age groups (20–45 years).

Subgroep analysis in the oldest group.

- The oldest group was subdevided in 4 subgroups.
  - 40 years
  - 41 years
  - 42 years
  - 43 years and older



CDR after donor insemination in four pre-specified age subgroups of the oldest patients.



Figuur 3a. Cumulative live birth delivery rates after donor insemination in four pre-specified age subgroups of the oldest patients, i.e. 40, 41, 42 and the >43 years age group.

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Results of subgroup analysis.

Group/Number	Crude CDR	CDR
40 years (82 pat.)	37%	61%
41 years (71 pat.)	27%	58%
42 years (34 pat.)	12%	32%
>43 years (36 pat.) (after 6 cycles!)	14%	20%

Reasons for discontinuation of the therapy

- Psychologically too stressful
- Financial burden too high
- Switch to an other therapy: IVF/ ICSI
- Change partner
- Death of the partner
- Several reasons connected to work, relationships, transport, etc.
- Oldest age group: ! no medical reason was found to stop further treatment!

Conclusion (1)

- This life table analysis can easily be used to inform our patients about their chances for delivery using donor sperm.

- The influence of age on the outcome was confirmed, but acceptable CDR's were observed in older age groups, which is in contrast with an anticipated low success rate; the major reason for discontinuing treatment.

Conclusion (2)

- CDR for 40-45 year old patients was 52% and crude CDR was 26% after 12 cycles.
- Women up to 42 years of age can be counselled to continue treatment