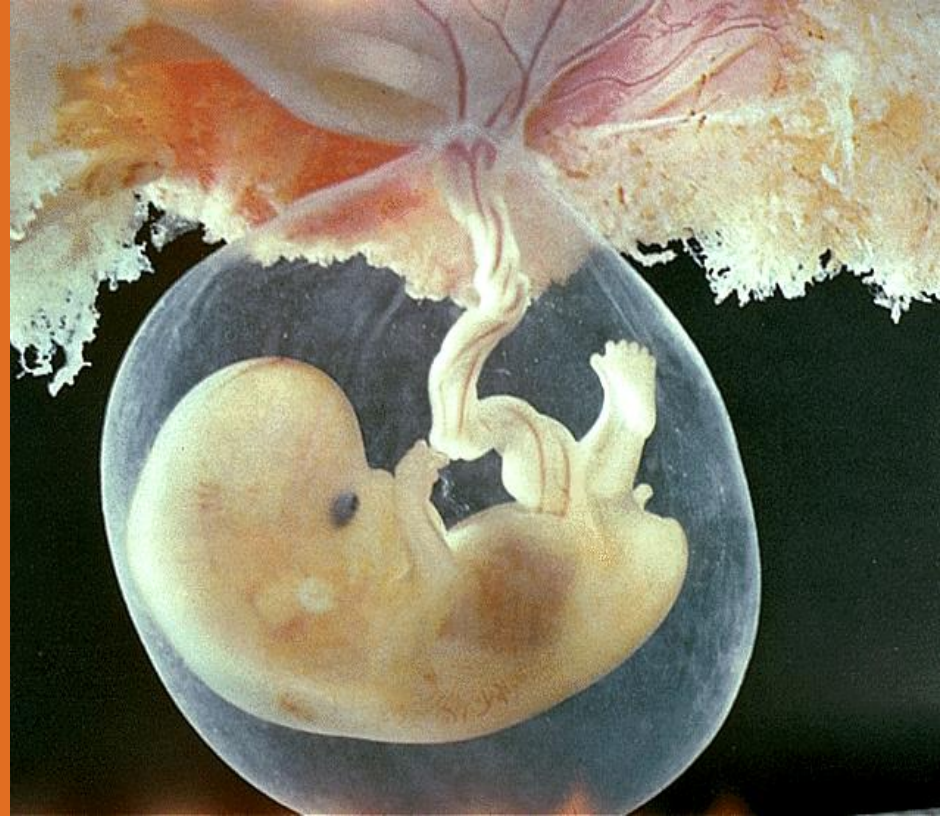


**Canadian Assisted
Reproductive
Technologies Register Plus
(CARTR Plus)**



**Canadian Fertility and Andrology Society
65th Annual Meeting – Ottawa
September 19 – 21, 2019**

List of abbreviations

CS	Cycle start
RET	Oocyte retrieval
ET	Embryo transfer
IVF	In vitro fertilization
FET	Frozen embryo transfer
PGT-A/PGT-M	Preimplantation Genetic Testing for Aneuploidy/Monogenic (Single Gene) Diseases
IVM	In vitro maturation
OHSS	Ovarian hyperstimulation syndrome
eSET	Elective single embryo transfer
neSET	Non-elective single embryo transfer
eDET	Elective double embryo transfer
neDET	Non-elective double embryo transfer

Disclaimer

- This report is based on data submitted by assisted reproductive technology clinics from across Canada to the CARTR Plus database. Although significant effort has been made to ensure the accuracy of the information presented in this report, neither the authors nor BORN Ontario nor any other parties make any representation or warranties as to the accuracy, reliability or completeness of the information contained herein.
- Permission is granted for the reproduction of these materials solely for non-commercial and educational purposes.

Suggested citations

Canadian Assisted Reproductive Technologies Registry (CARTR) Plus. Final treatment cycle and pregnancy outcome data for 2017. Better Outcomes Registry & Network Ontario. Ottawa ON, September 2019.

Canadian Assisted Reproductive Technologies Registry (CARTR) Plus. Preliminary treatment cycle data for 2018. Better Outcomes Registry & Network Ontario. Ottawa ON, September 2019.

Notes

- **All data current as of May 2019**
- **Treatment cycle outcomes for 2018 cycle starts**
 - Based on 36 clinics
- **Birth outcomes for 2017 cycle starts**
 - Based on 36 clinics

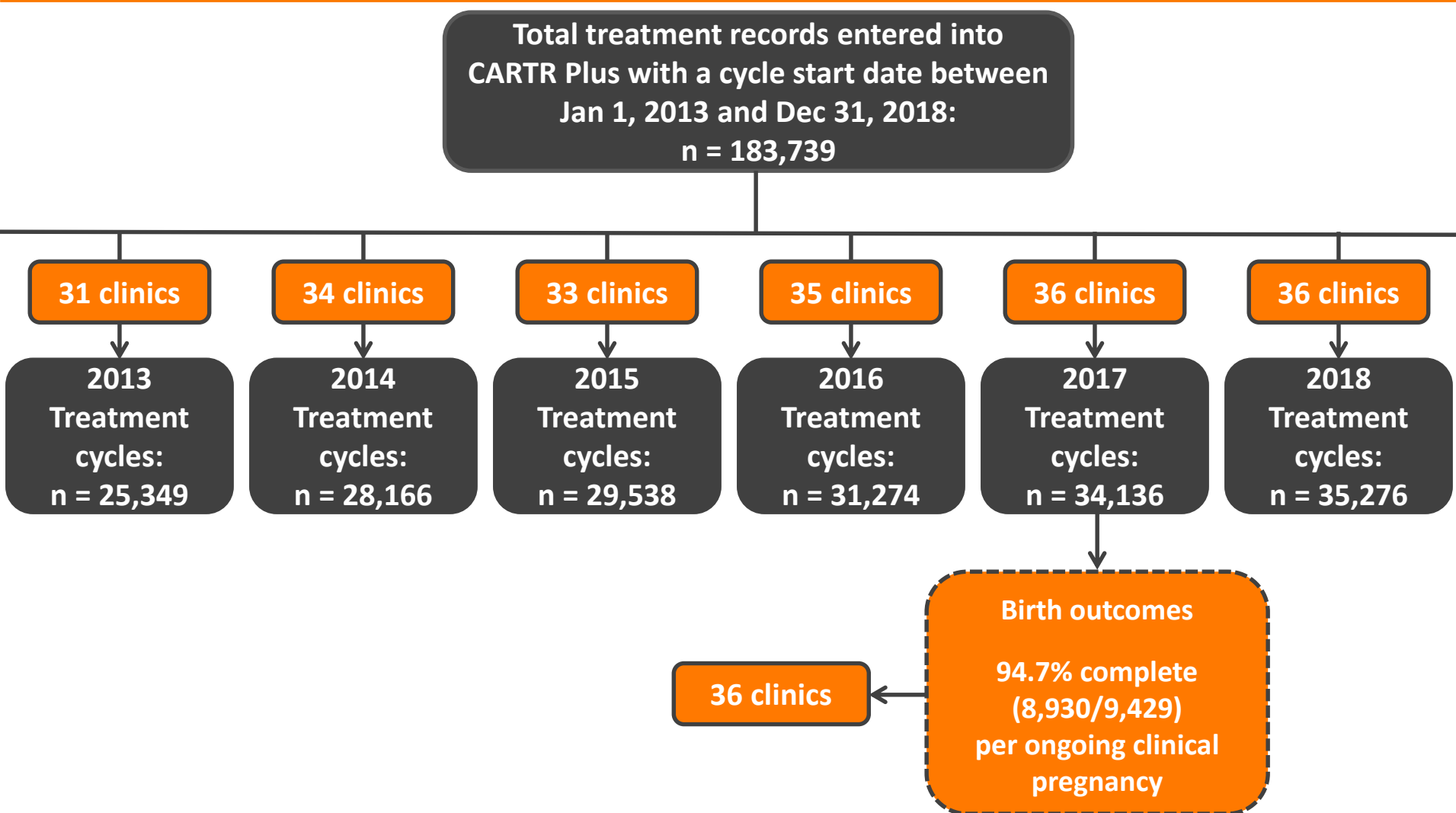
Notes

- These slides present descriptive estimates on which no formal statistical tests have been carried out; therefore, differences across treatment cycles, patient characteristics or embryo transfer characteristics may not be statistically significant and should be interpreted cautiously
- Unless otherwise specified, denominators for birth outcomes are based on the pregnancy level

INTRODUCTION

All ART treatment cycles (fresh and frozen)

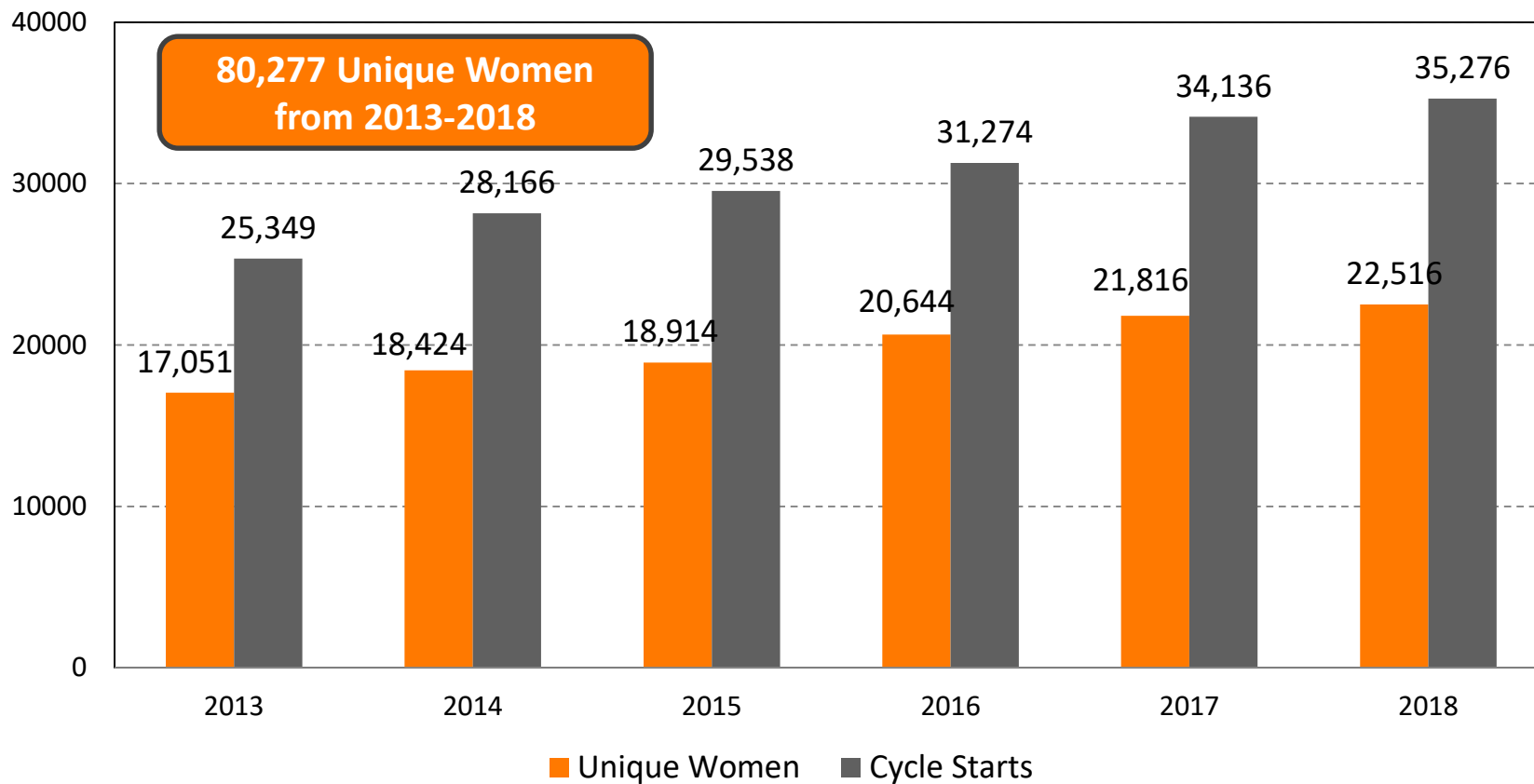
CARTR Plus records extracted May 2019



* Unacknowledged records were included if they were "submitted" or if they linked to an outcome

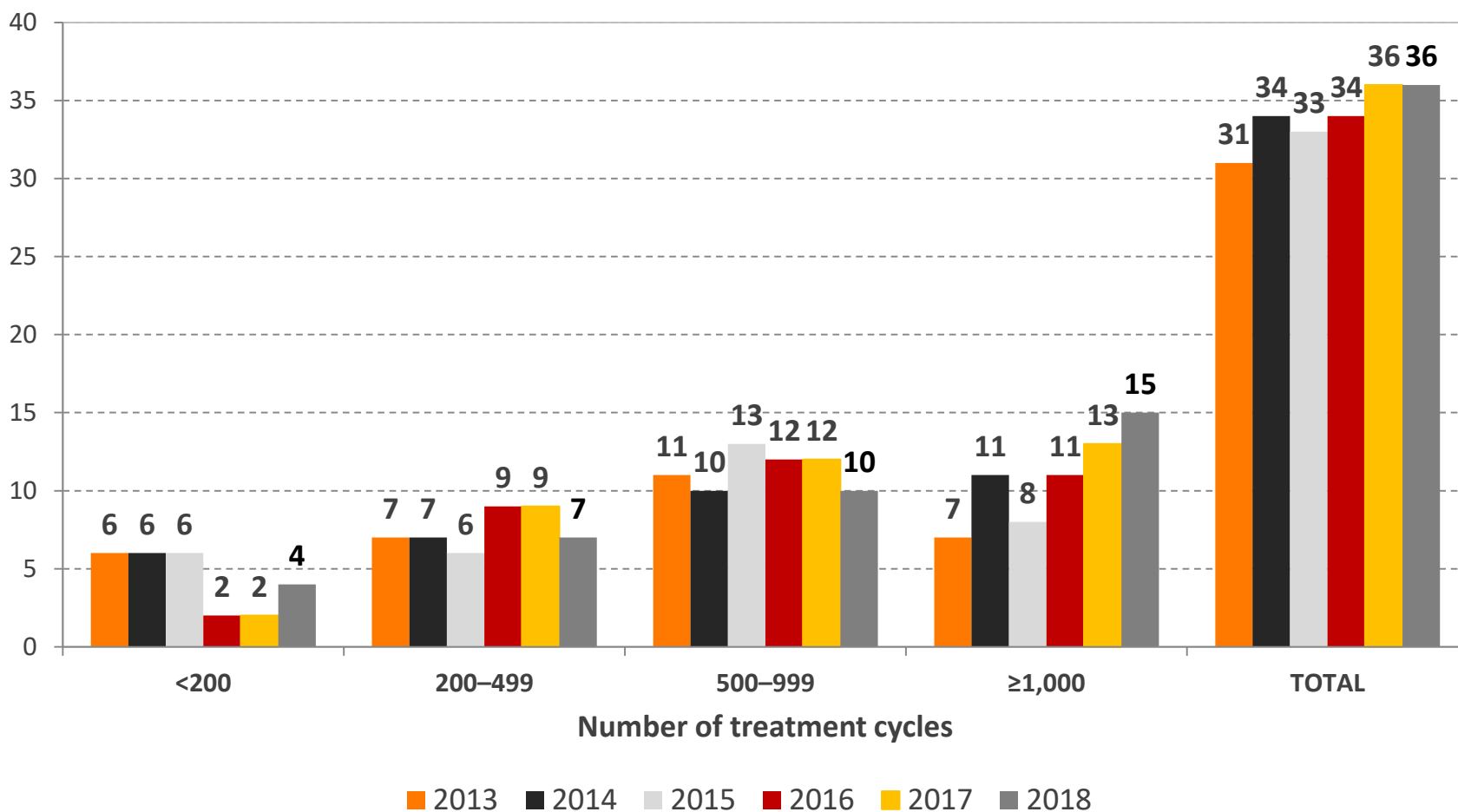
Number of Unique Women

All ART treatment cycles



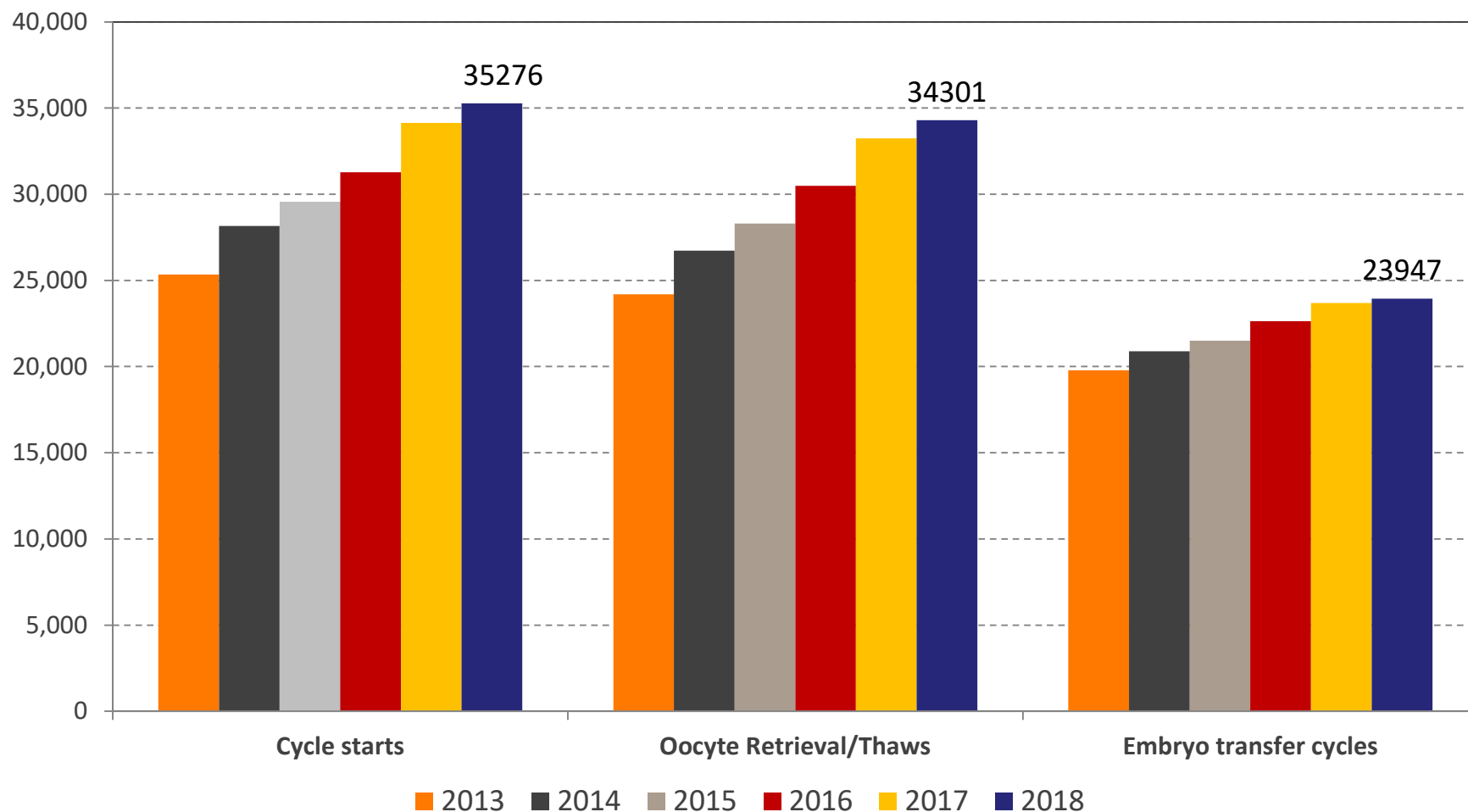
Volume of treatment cycles by clinic

All ART treatment cycles



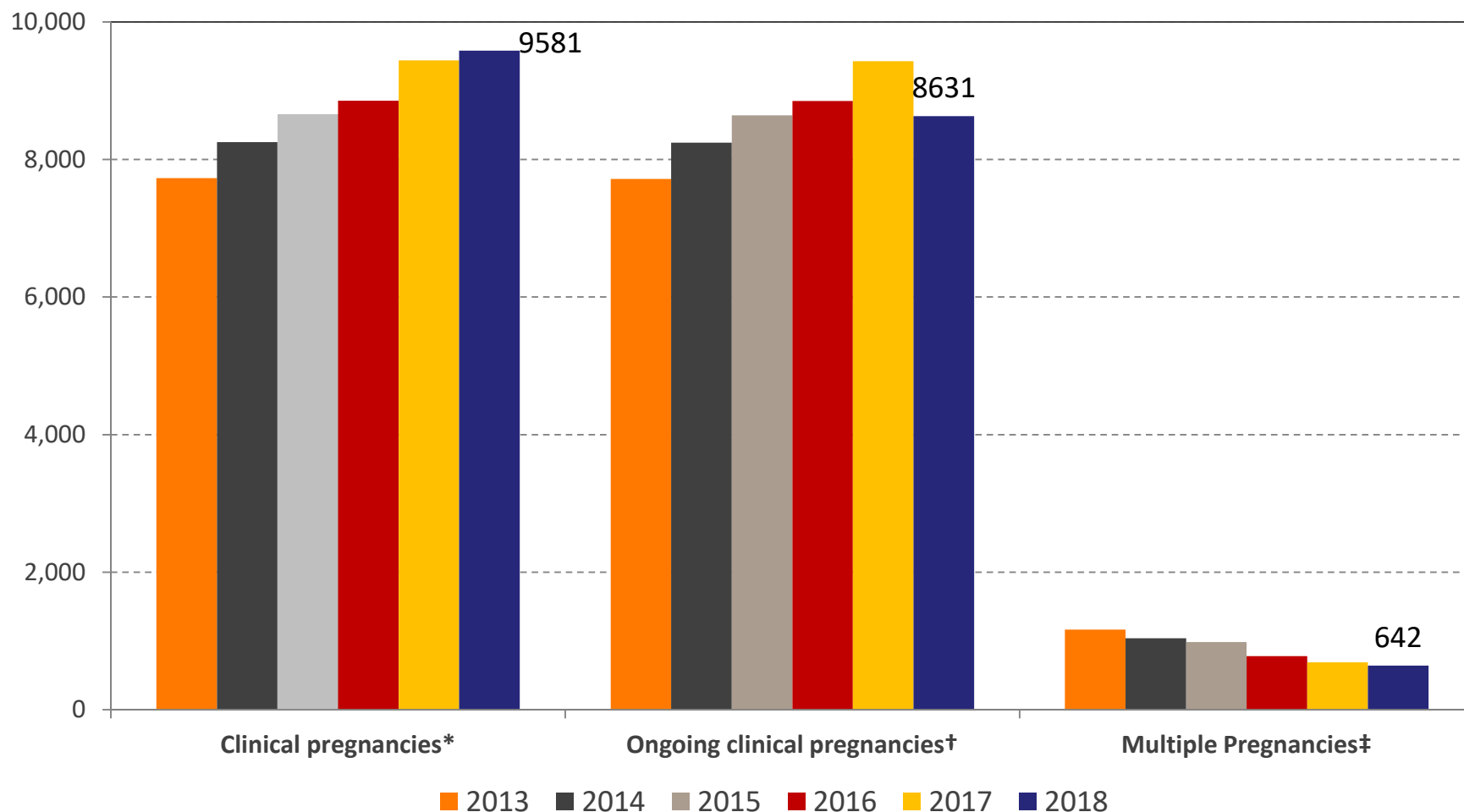
Number of cycles

All ART treatment cycles



Number of clinical pregnancies

All ART treatment cycles



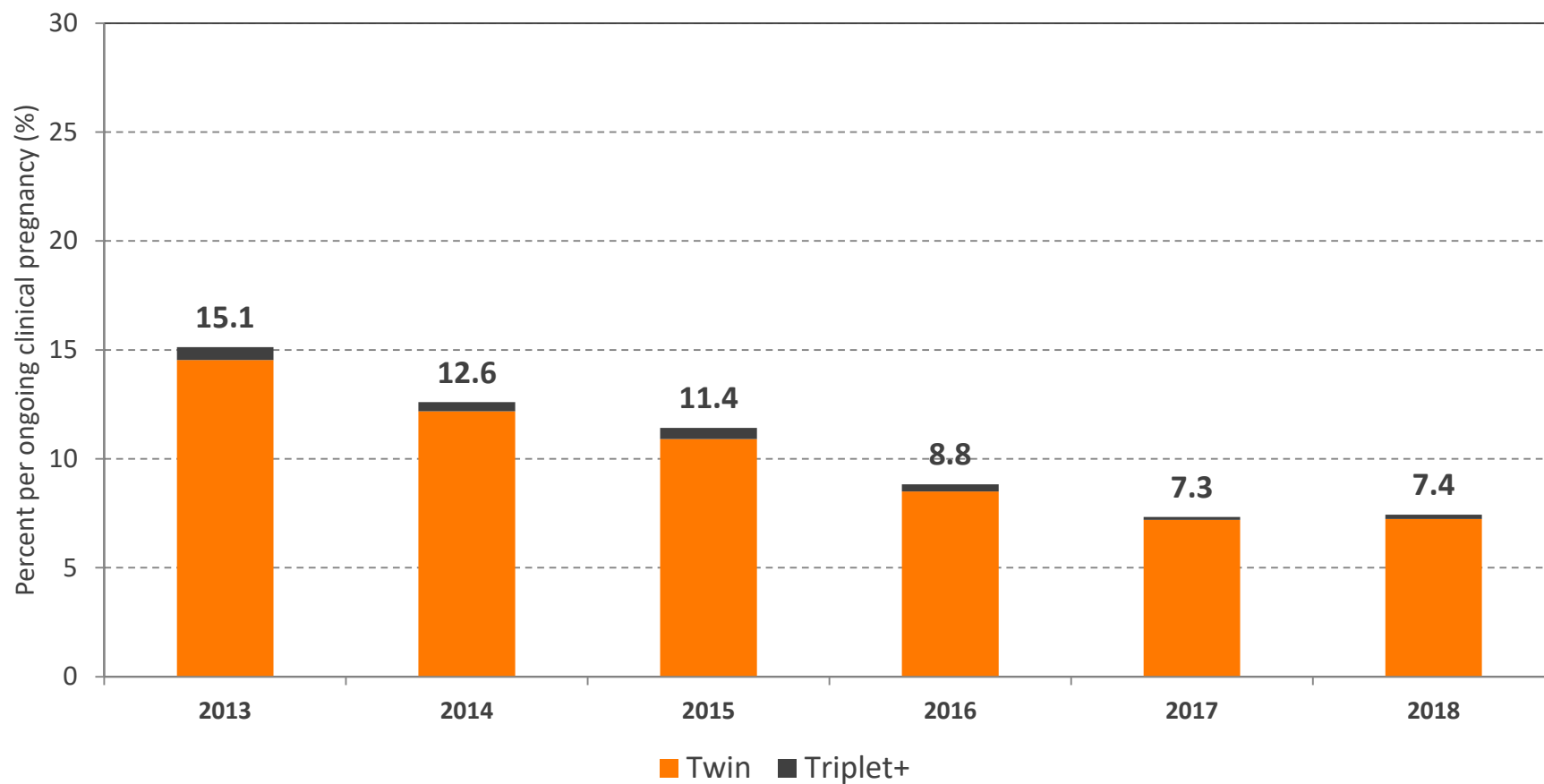
* Clinical pregnancy: clinical intrauterine, heterotopic, or ectopic pregnancy

† Ongoing clinical pregnancy: clinical pregnancy with ≥ 1 fetal heart beat on ultrasound

‡ Multiple pregnancy: ongoing clinical pregnancy with >1 fetal heart beat on ultrasound

Percentage of multiple pregnancies

All ART treatment cycles



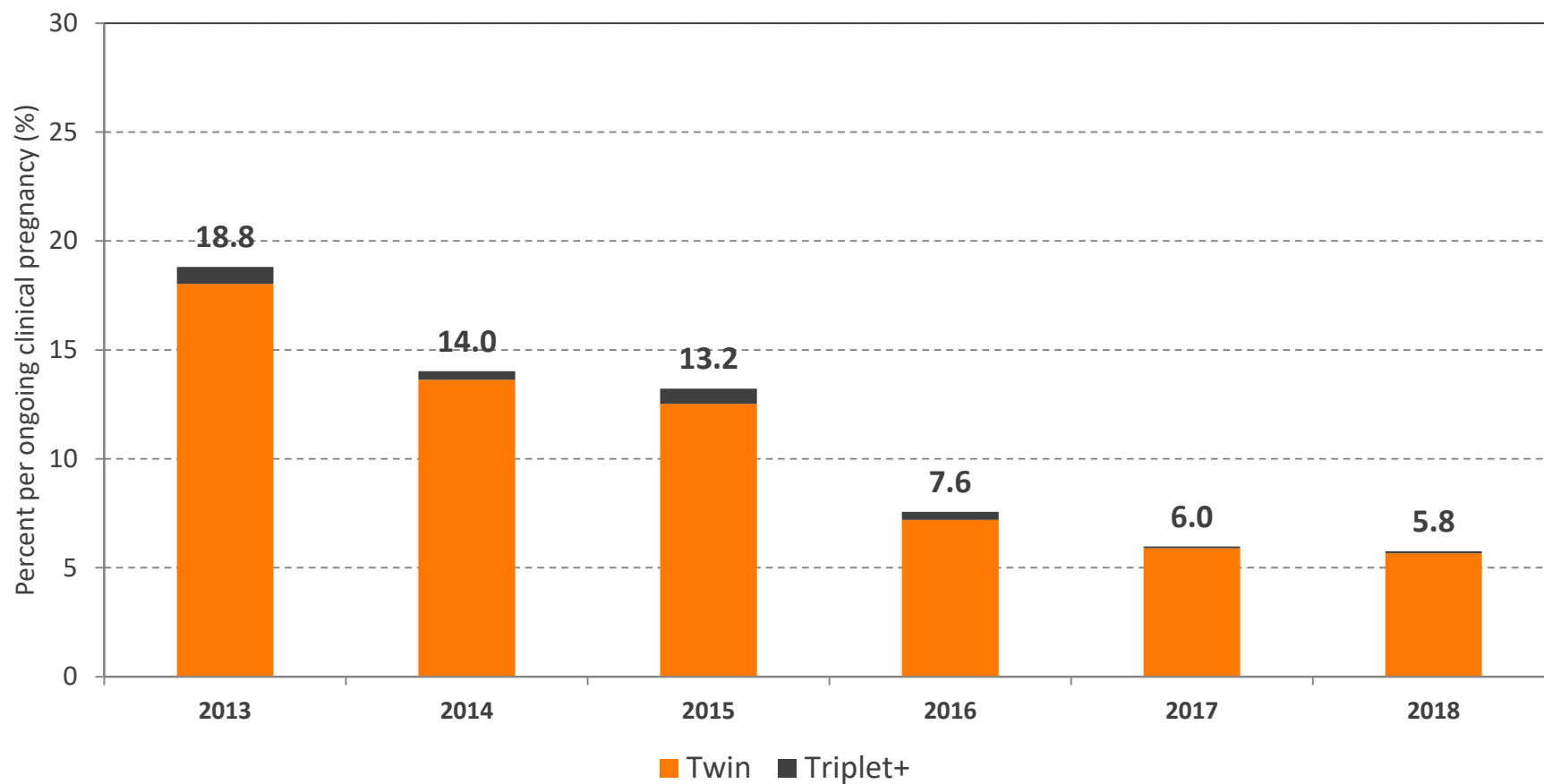
Twin	1,222	1,005	943	752	679	625
Triplet +	45	34	44	29	12	17

* Ongoing clinical pregnancy: clinical pregnancy with ≥ 1 fetal heart beat on ultrasound

† Multiple pregnancy: ongoing clinical pregnancy with >1 fetal heart beat on ultrasound

Percentage of multiple pregnancies in Ontario

All ART treatment cycles



Twin	585	449	398	307	292	264
Triplet +	25	13	22	16	4	4

* Ongoing clinical pregnancy: clinical pregnancy with ≥ 1 fetal heart beat on ultrasound

† Multiple pregnancy: ongoing clinical pregnancy with >1 fetal heart beat on ultrasound

Specialized services

All ART treatment cycles (fresh and frozen), 2018

Description	Number of cycles
Gestational carrier	949
PGT-A/PGT-M	6,535
Oocyte or embryo banking due to cancer treatment	464
Oocyte or embryo banking due to non-cancer/non-medical reasons	611
Any use of donor oocytes or embryos	3,563
Frozen oocyte IVF	655

Oocyte or embryo freezing for non-medical reasons

2013 – 2018

Year	Oocyte Freezing	Embryo Freezing
2013	94	40
2014	135	40
2015	204	80
2016	280	52
2017	357	64
2018	504	108
Overall	1,574	384

PGT-A and PGT-M

2013 – 2018

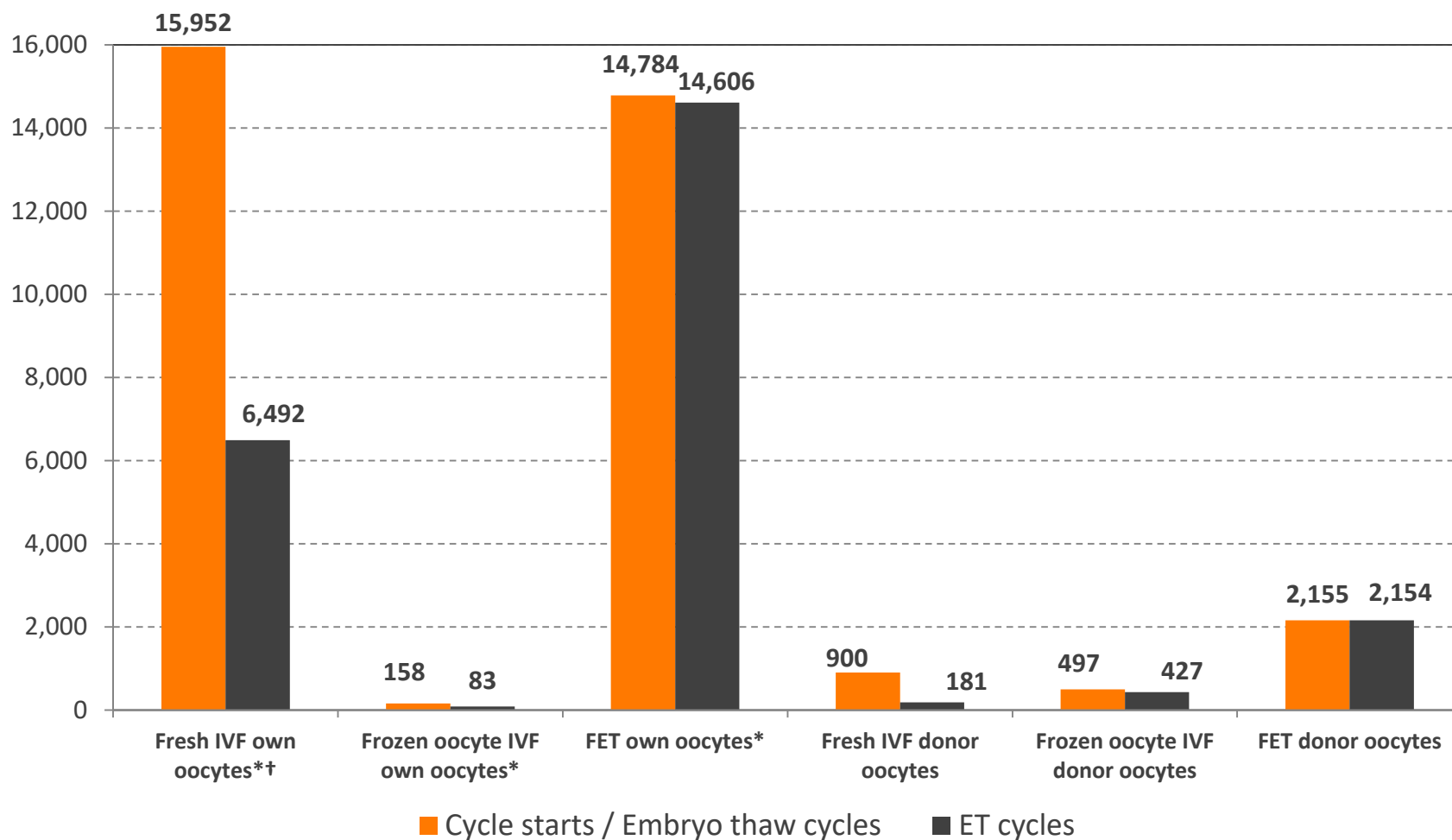
Year	PGT-A	PGT-M
	# Cycles	# Cycles
2013	243	240
2014	605	313
2015	1,660	951
2016	3,371	1,200
2017	4,700	1,182
2018	6,090	640
Overall	16,669	4,526

TREATMENT CYCLES FOR 2018

All ART treatment cycles (fresh and frozen)

Number of treatment cycles

2018

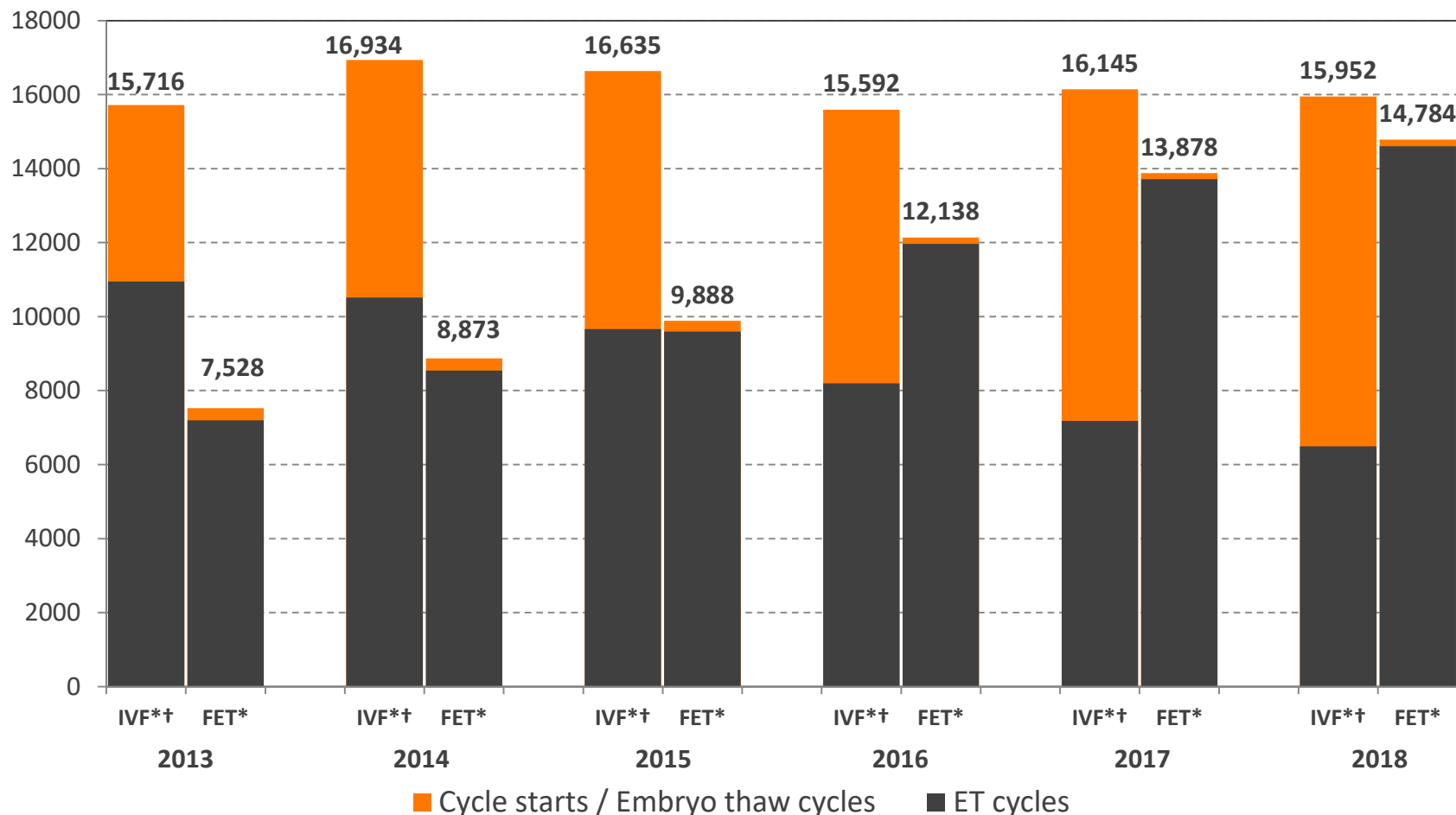


* Own oocytes exclusively

† Includes Natural & Modified Natural IVF, own oocytes

Number of treatment cycles, by year

IVF and FET – own oocytes, 2013 – 2018

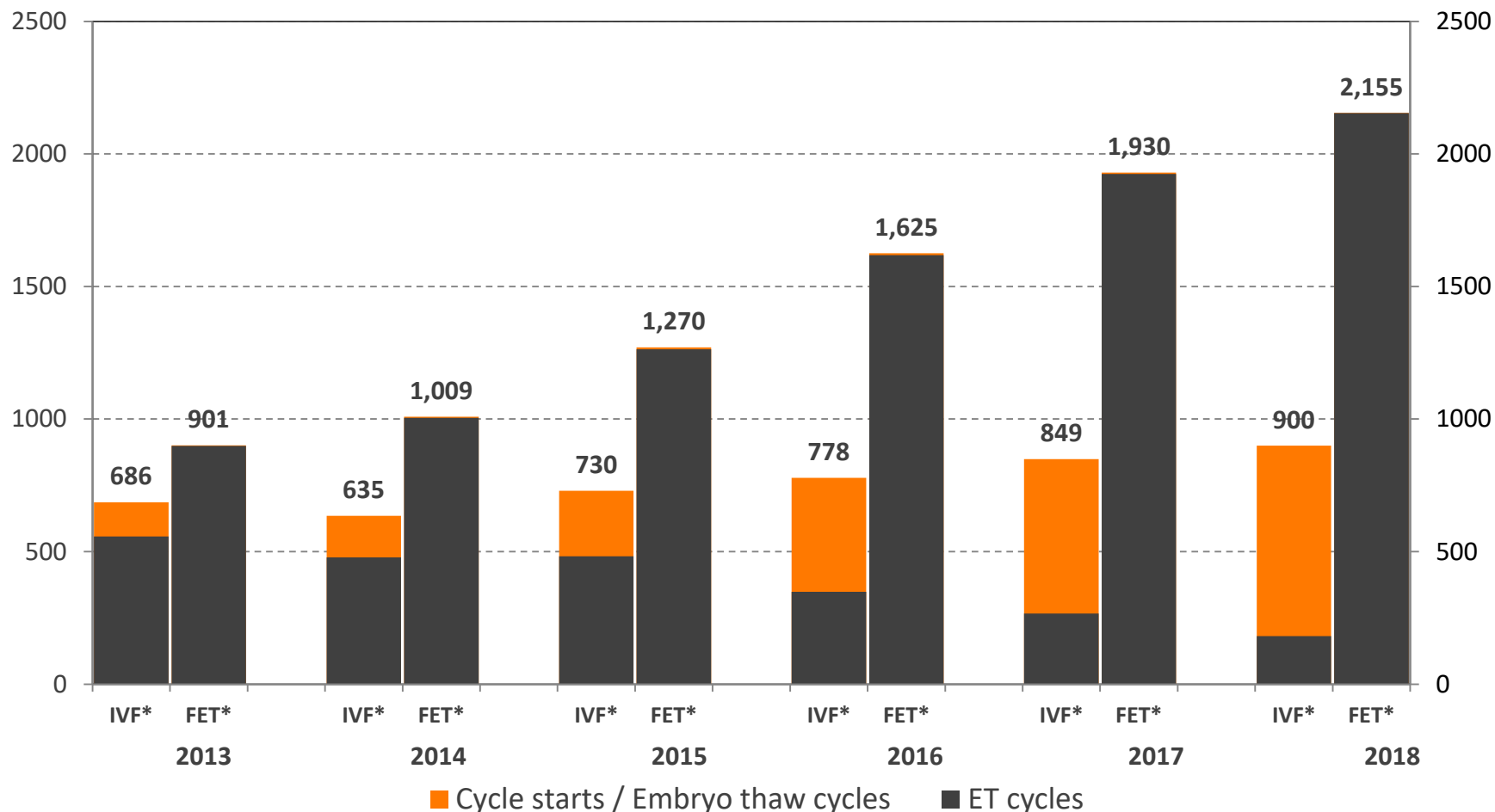


* Own oocytes exclusively

† Includes Natural & Modified Natural IVF, own oocytes

Number of treatment cycles, by year

IVF and FET – donor oocytes, 2013 – 2018



* Any donor oocytes

Type of treatment cycle, per cycle start

All ART treatment cycles (fresh and frozen), 2018



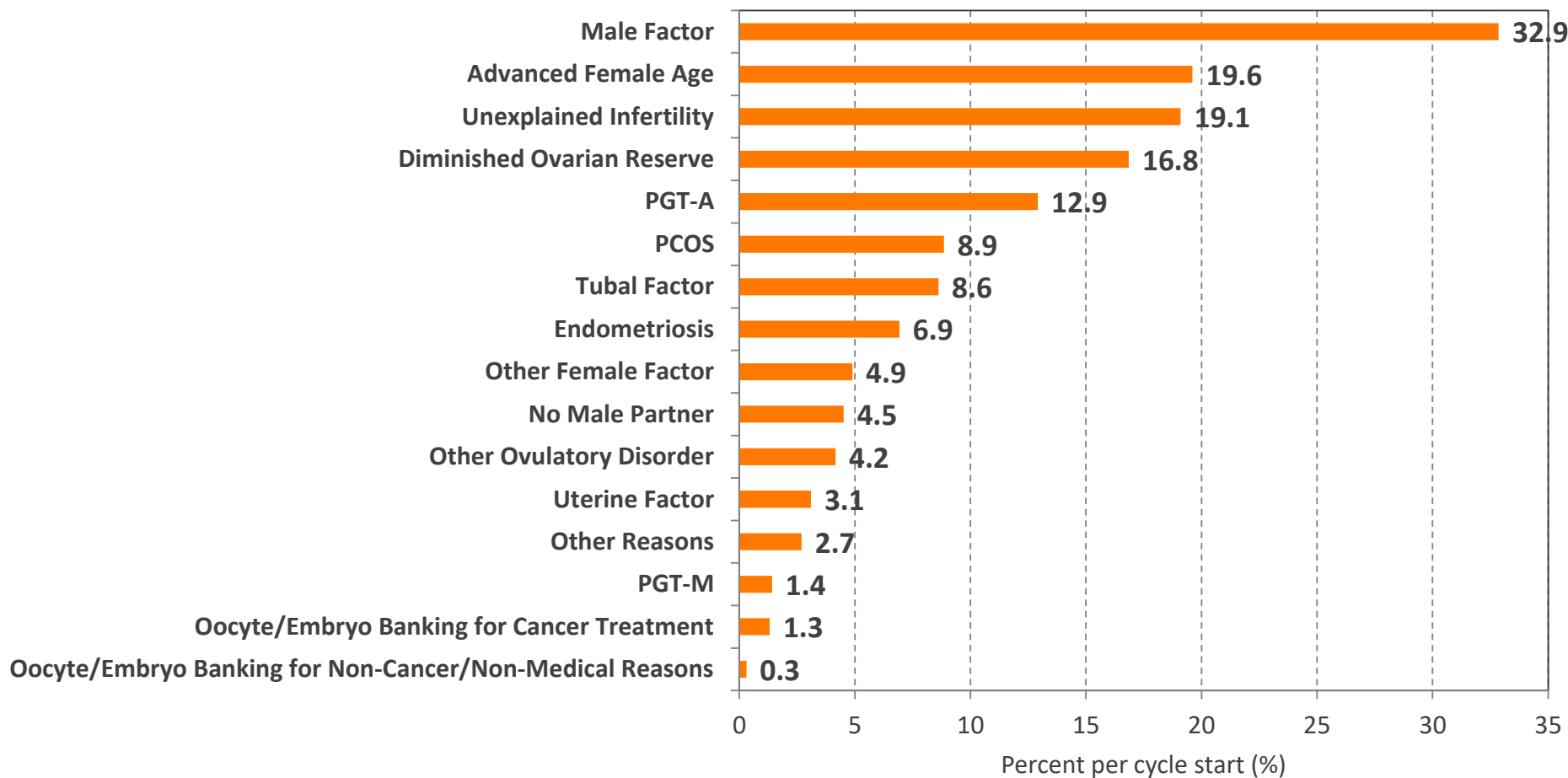
Type of treatment cycle	Number	Percent
IVF – own oocytes*†	15,952	45.2
Frozen oocyte IVF – own oocytes*	158	0.5
FET – own oocytes*	14,784	41.9
IVF – donor oocytes	900	2.6
Frozen oocyte IVF – donor oocytes	497	1.4
FET – donor oocytes	2,155	6.1
Oocyte banking	817	2.3
IVM	13	0.04
TOTAL TREATMENT CYCLES	35,276	

* Own oocytes exclusively

† Includes Natural & Modified Natural IVF, own oocytes

Reasons for treatment

All ART treatment cycles (fresh and frozen), 2018

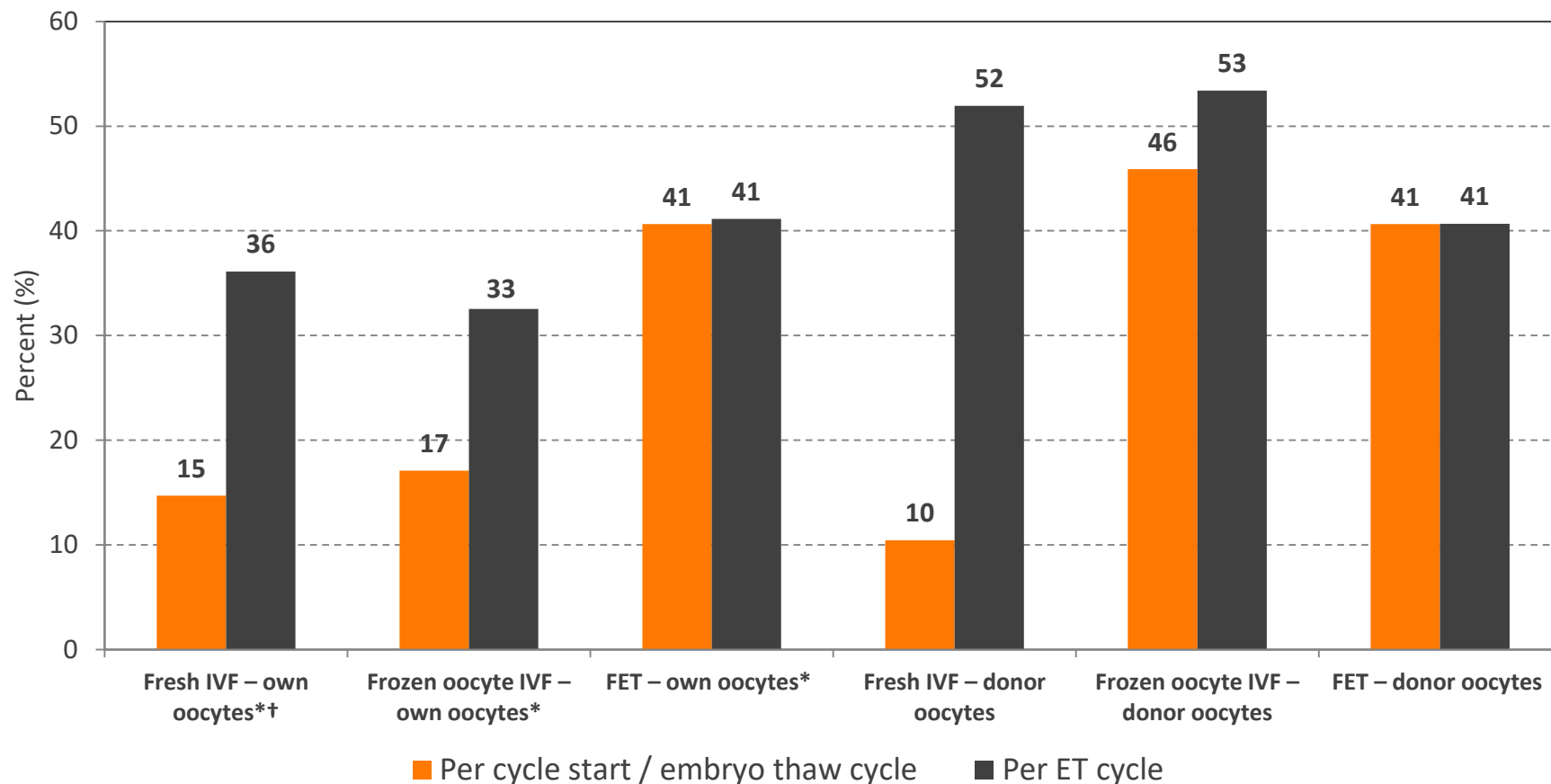


* Categories are not mutually exclusive

† Other reasons include: gonadotoxic therapy, no female partner and peritoneal factor or severe adhesions

Clinical pregnancy by type of treatment cycle

2018



■ Per cycle start / embryo thaw cycle ■ Per ET cycle

Clinical pregnancies‡

2,344

27

6,010

94

228

876

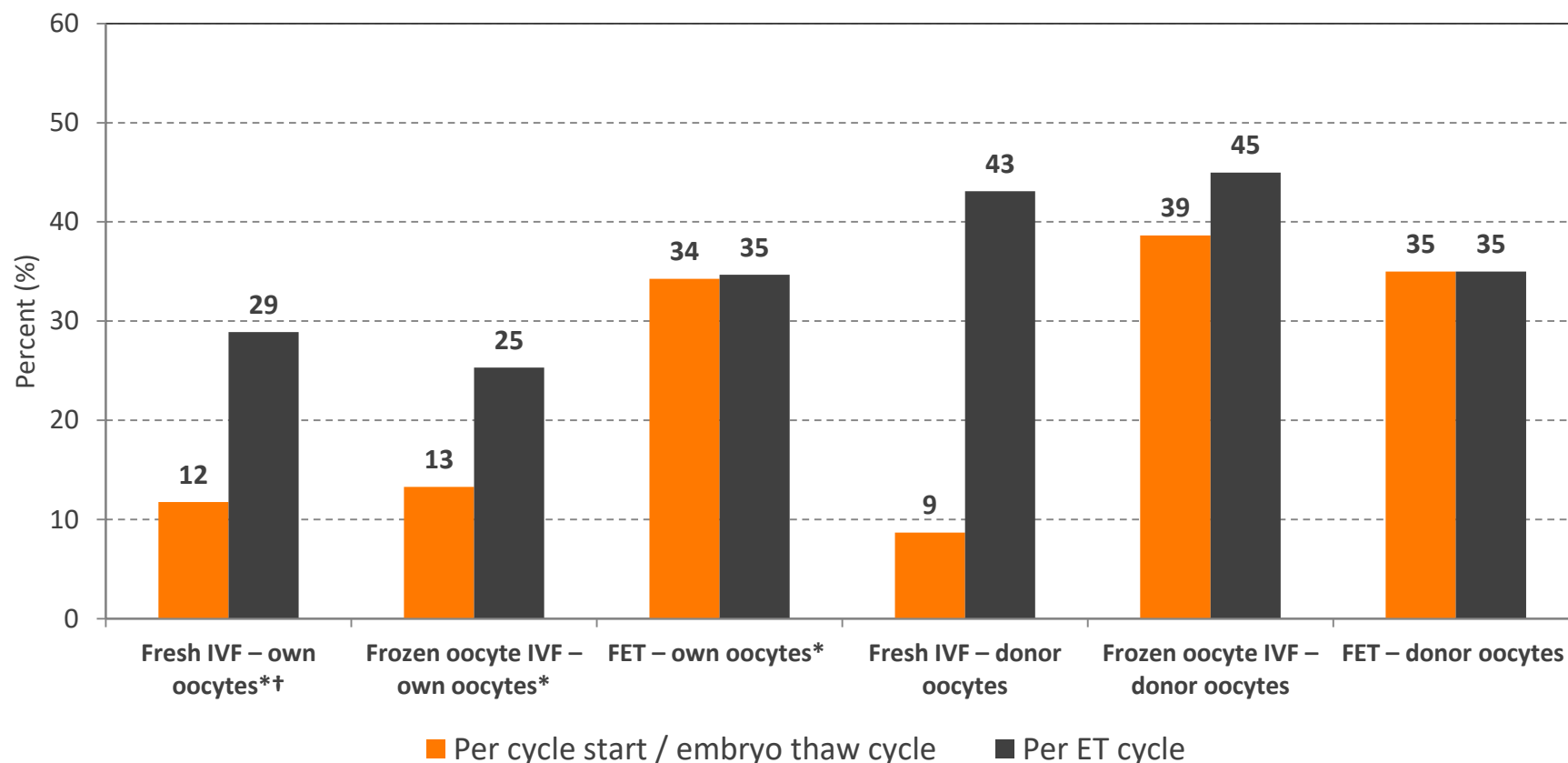
* Own oocytes exclusively

† Includes Natural & Modified Natural IVF, own oocytes

‡ Clinical pregnancy: clinical intrauterine, heterotopic, or ectopic pregnancy

Singleton ongoing clinical pregnancy by type of treatment cycle

2018



Singleton pregnancies‡

1,876

21

5,066

78

192

754

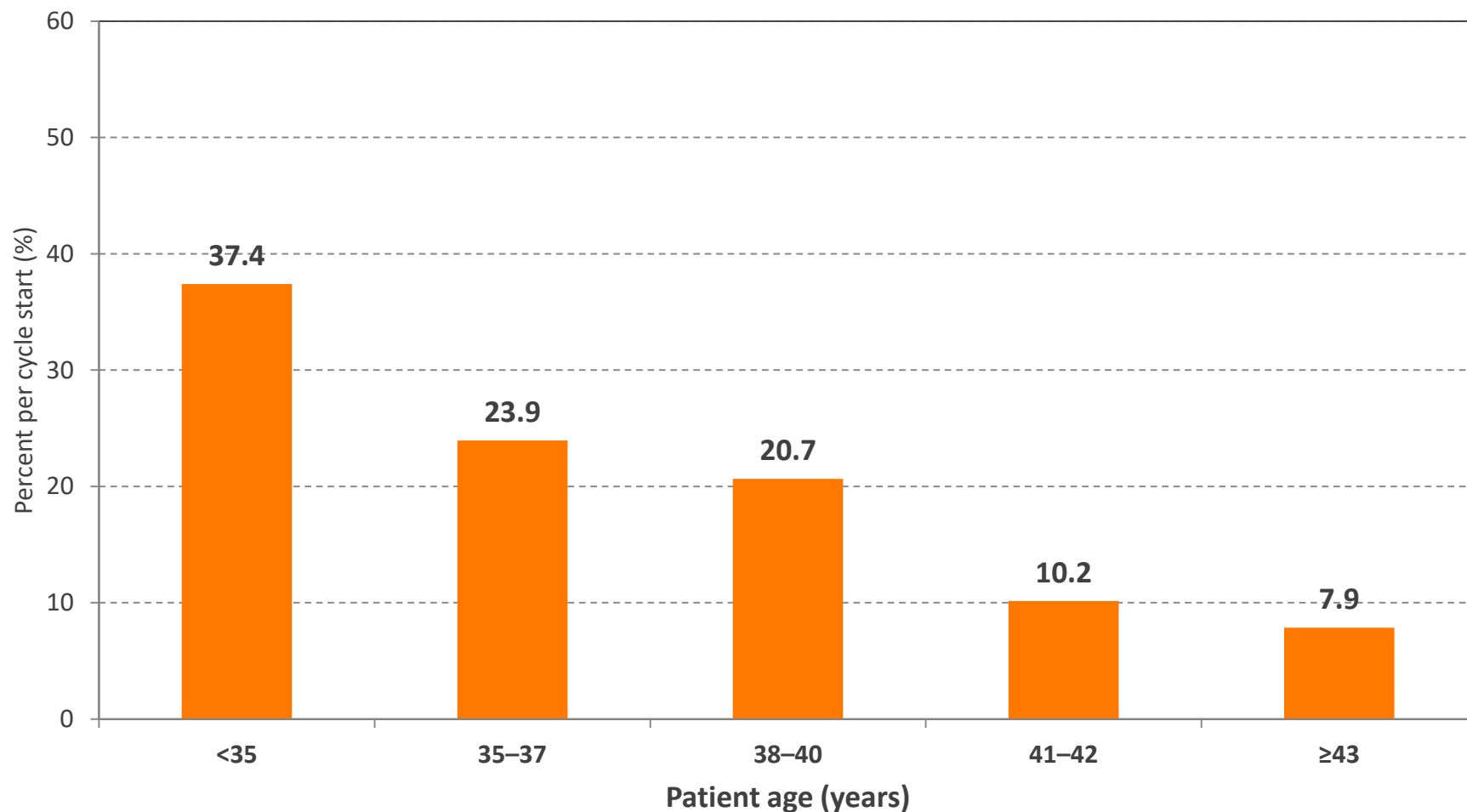
* Own oocytes exclusively

† Includes Natural & Modified Natural IVF, own oocytes

‡ Singleton pregnancy: ongoing clinical pregnancy with only one fetal heart beat on ultrasound

Patient age

All ART treatment cycles (fresh and frozen), 2018

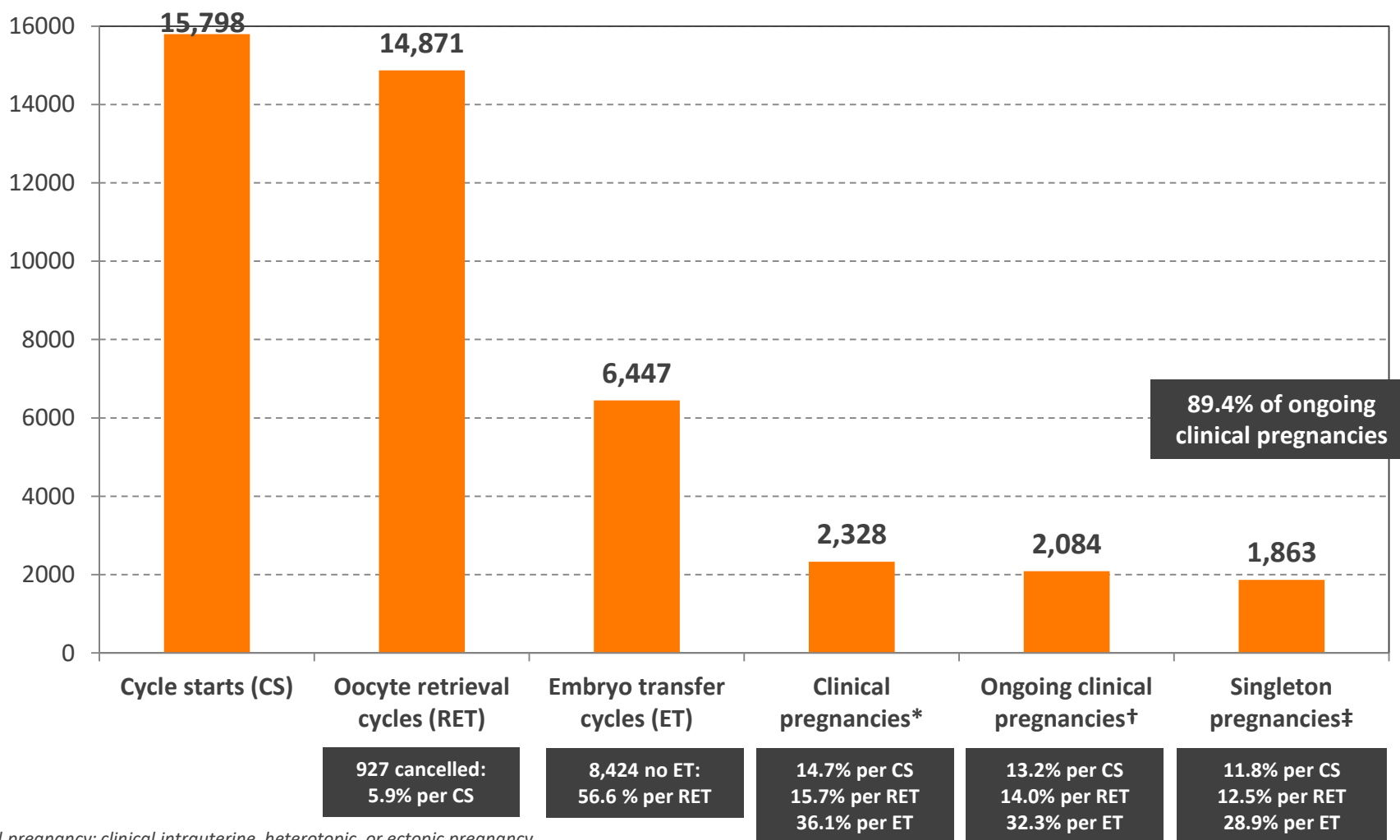


TREATMENT CYCLES FOR 2018

ART cycles using IVF – own oocytes

Stage of treatment and treatment outcomes

ART cycles using IVF – own oocytes, 2018



89.4% of ongoing clinical pregnancies

927 cancelled:
5.9% per CS

8,424 no ET:
56.6% per RET

14.7% per CS
15.7% per RET
36.1% per ET

13.2% per CS
14.0% per RET
32.3% per ET

11.8% per CS
12.5% per RET
28.9% per ET

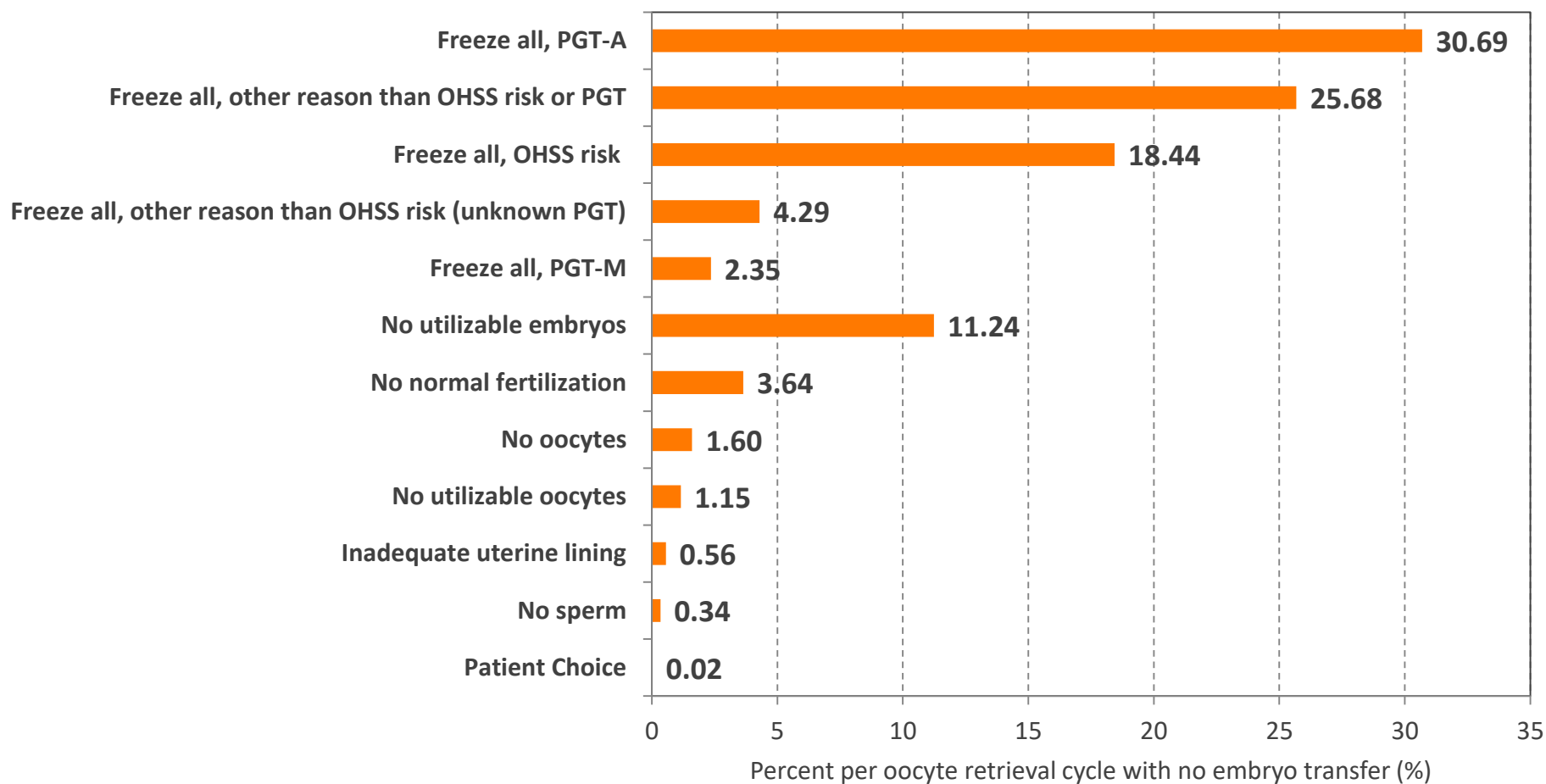
* Clinical pregnancy: clinical intrauterine, heterotopic, or ectopic pregnancy

† Ongoing clinical pregnancy: clinical pregnancy with ≥1 fetal heart beat on ultrasound

‡ Singleton pregnancy: ongoing clinical pregnancy with only one fetal heart beat on ultrasound

Reasons for no embryo transfer

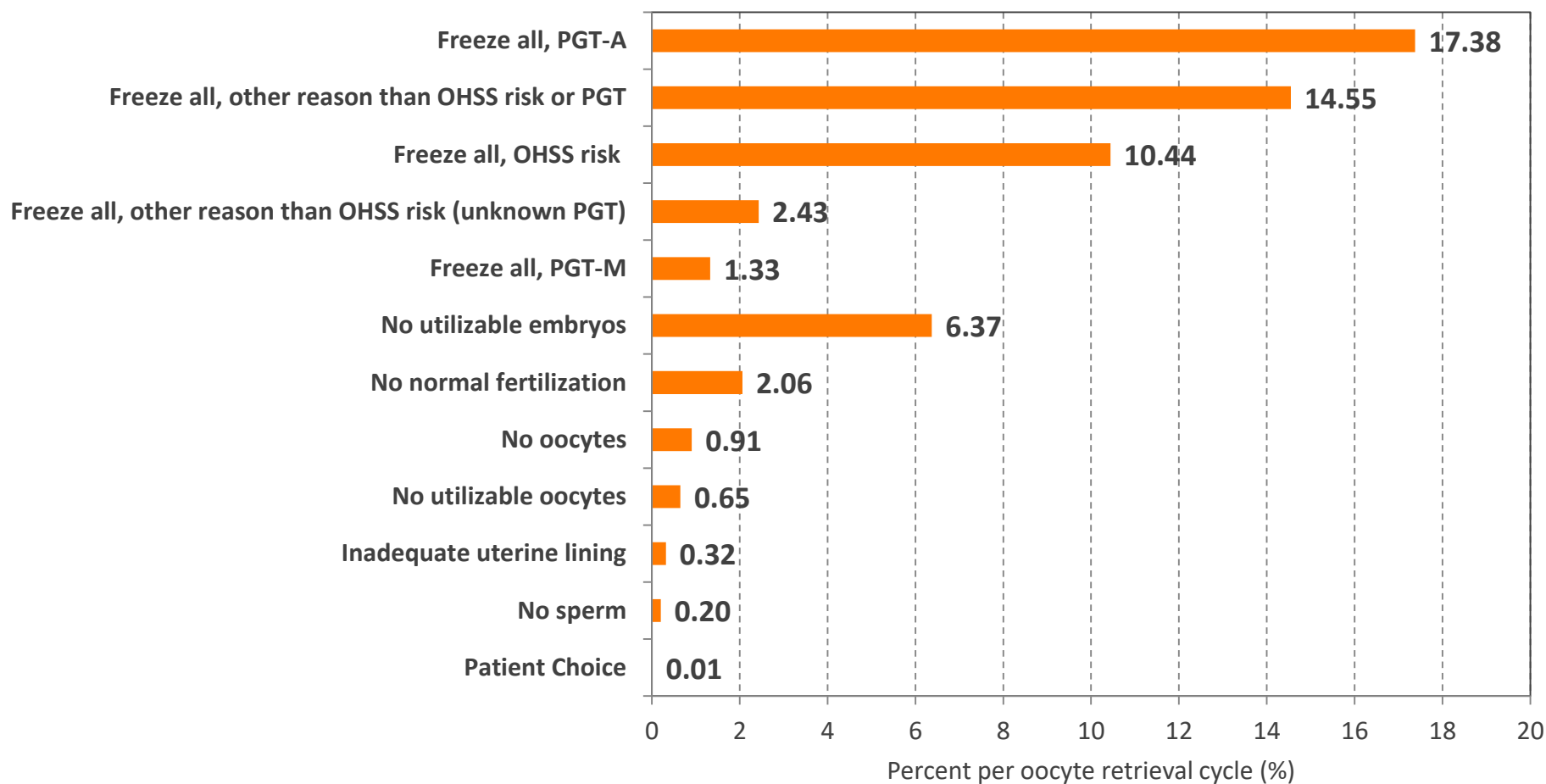
ART cycles using IVF – own oocytes, 2018



* Categories are mutually exclusive

Reasons for no embryo transfer

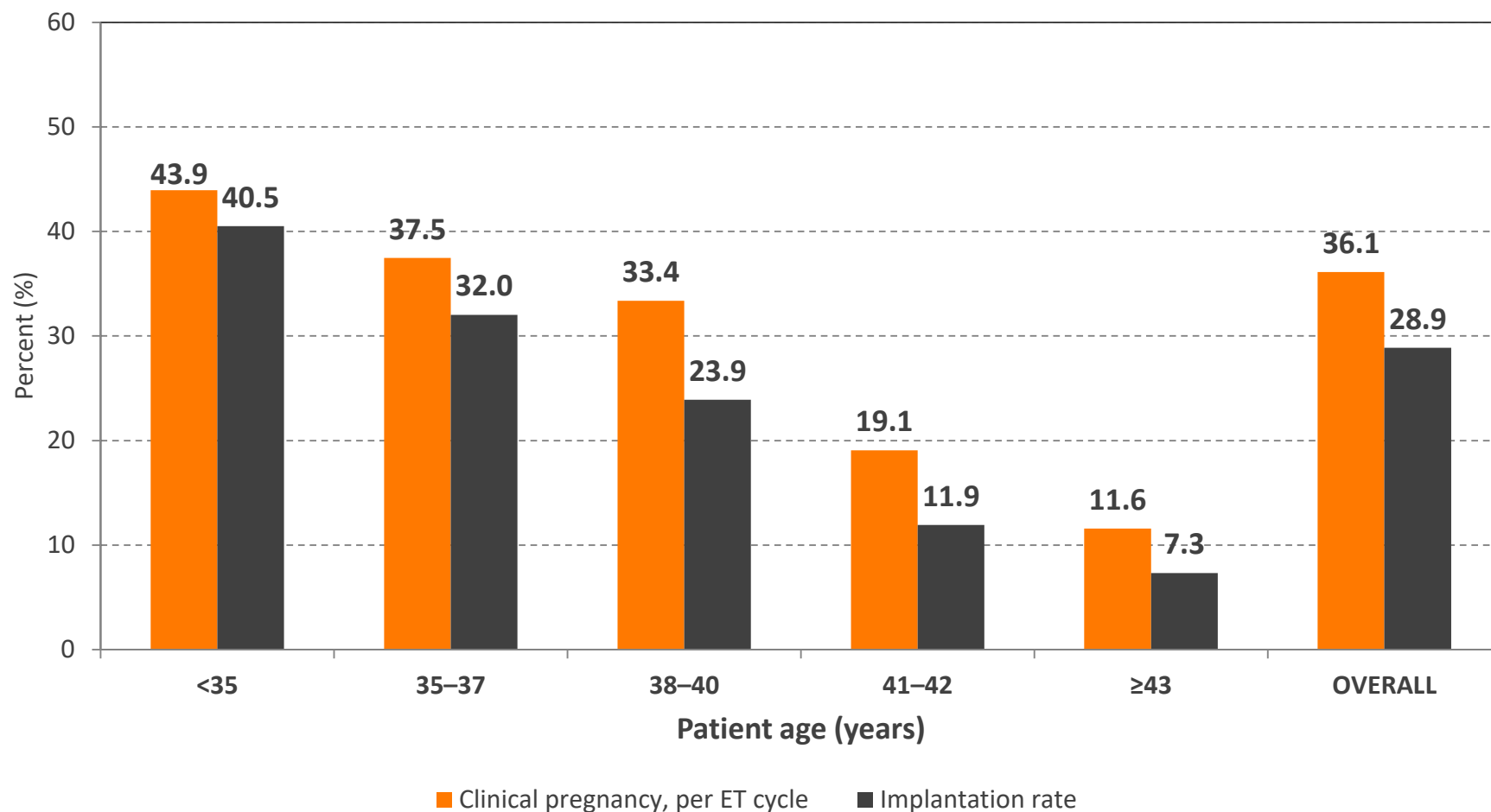
ART cycles using IVF – own oocytes, 2018



* Categories are mutually exclusive

Clinical pregnancy and implantation rate

ART cycles using IVF – own oocytes, 2018

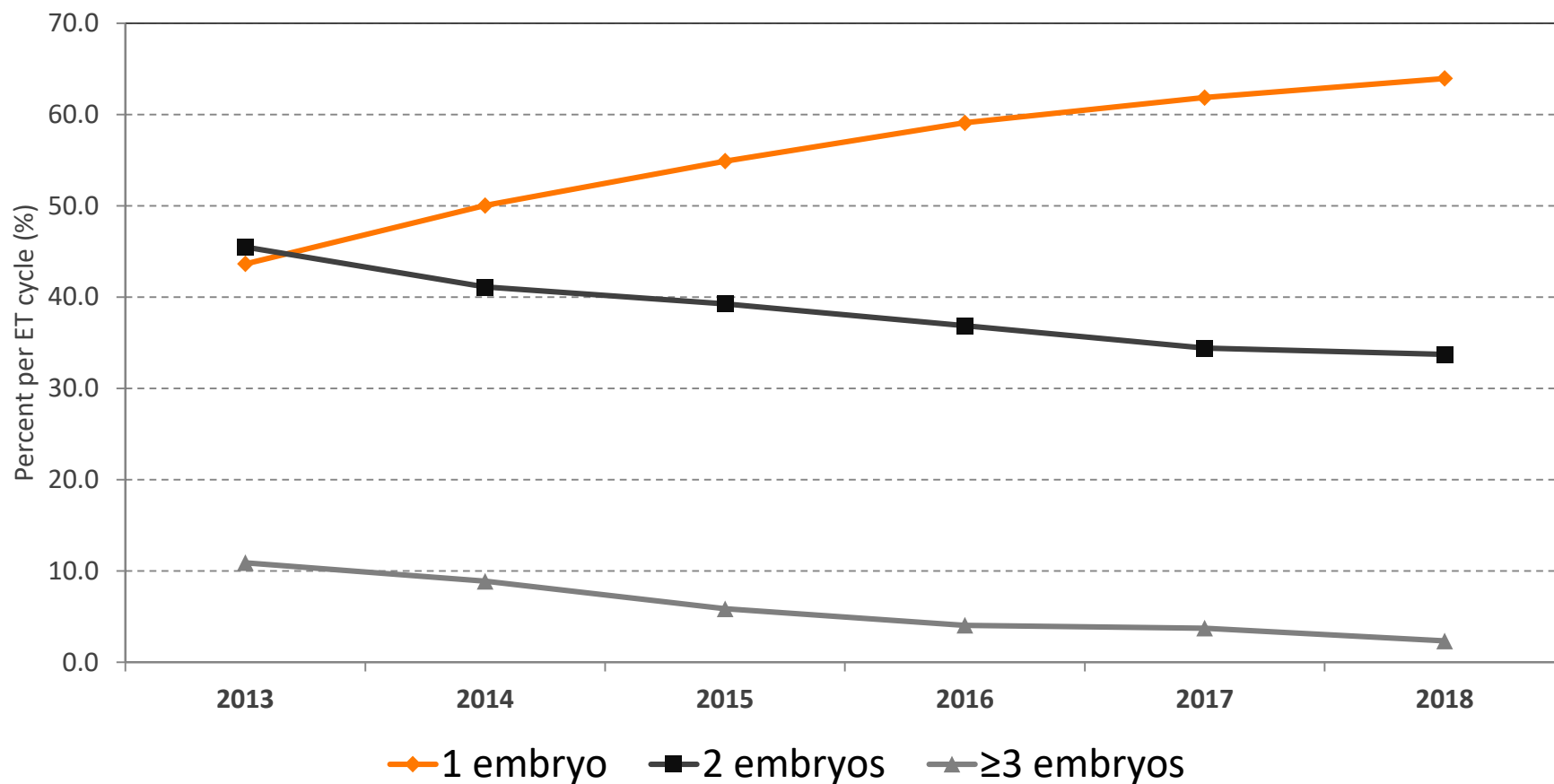


* Clinical pregnancy: clinical intrauterine, heterotopic, or ectopic pregnancy

† Implantation rate: number of gestational sacs observed on ultrasound, divided by the total number of embryos transferred

Number of embryos transferred, by year

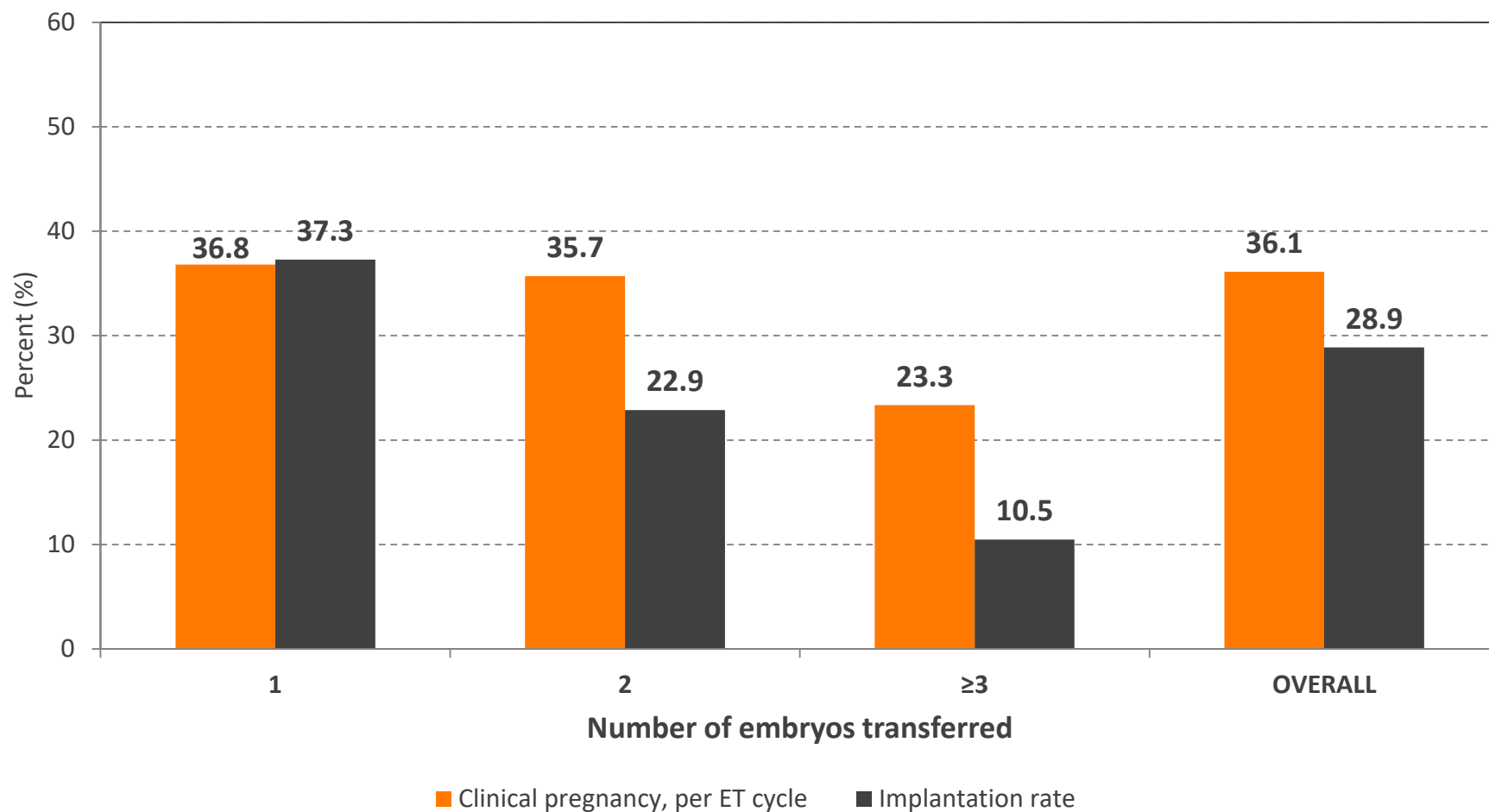
ART cycles using IVF – own oocytes, 2013 – 2018



* Excludes records with missing number of embryos transferred

Clinical pregnancy and implantation rate

ART cycles using IVF – own oocytes, 2018

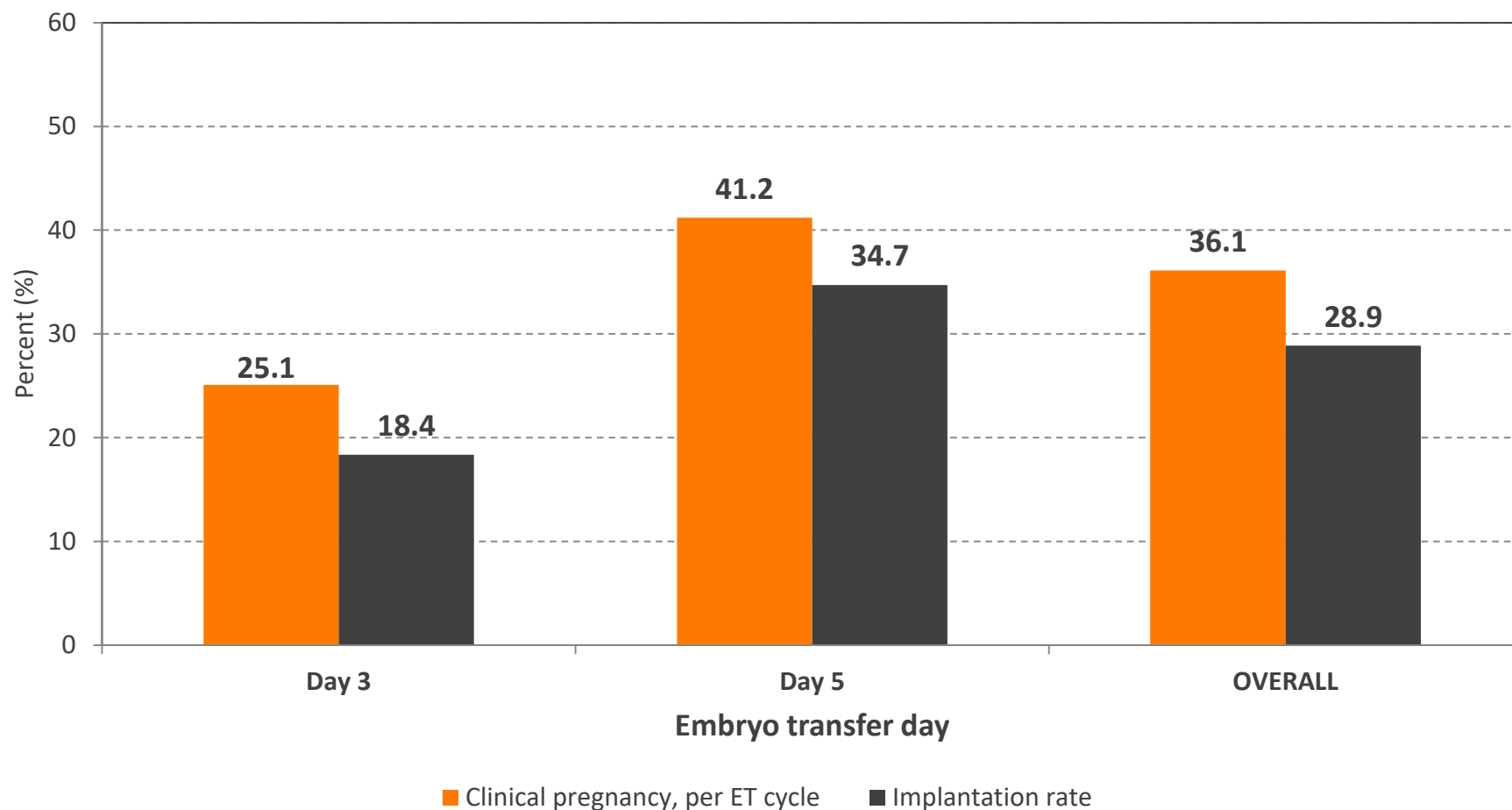


* Clinical pregnancy: clinical intrauterine, heterotopic, or ectopic pregnancy

† Implantation rate: number of gestational sacs observed on ultrasound, divided by the total number of embryos transferred

Clinical pregnancy and implantation rate

ART cycles using IVF – own oocytes, 2018



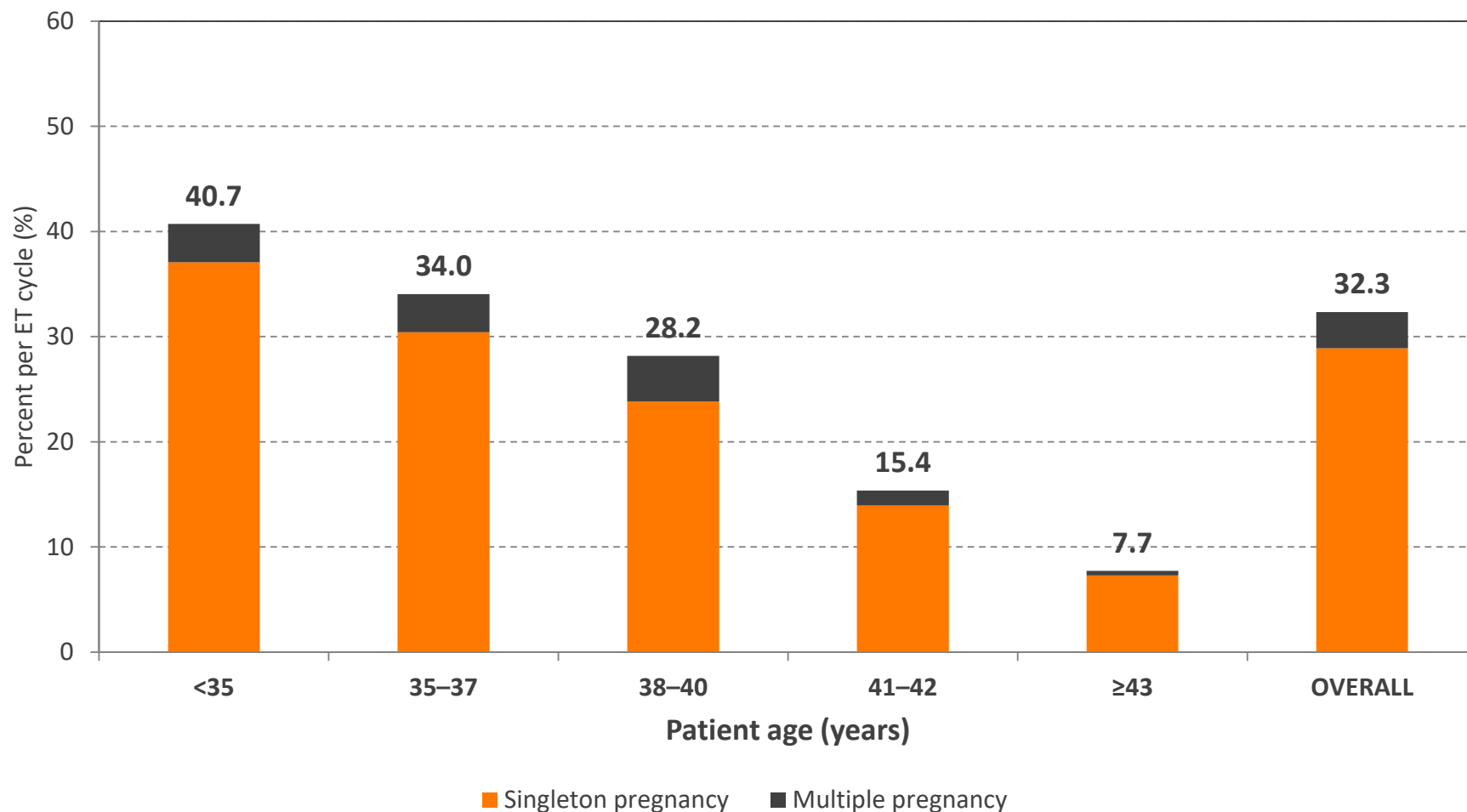
* Clinical pregnancy: clinical intrauterine, heterotopic, or ectopic pregnancy

† Implantation rate: number of gestational sacs observed on ultrasound, divided by the total number of embryos transferred

Proportion of cycles resulting in an ongoing clinical pregnancy



ART cycles using IVF – own oocytes, 2018

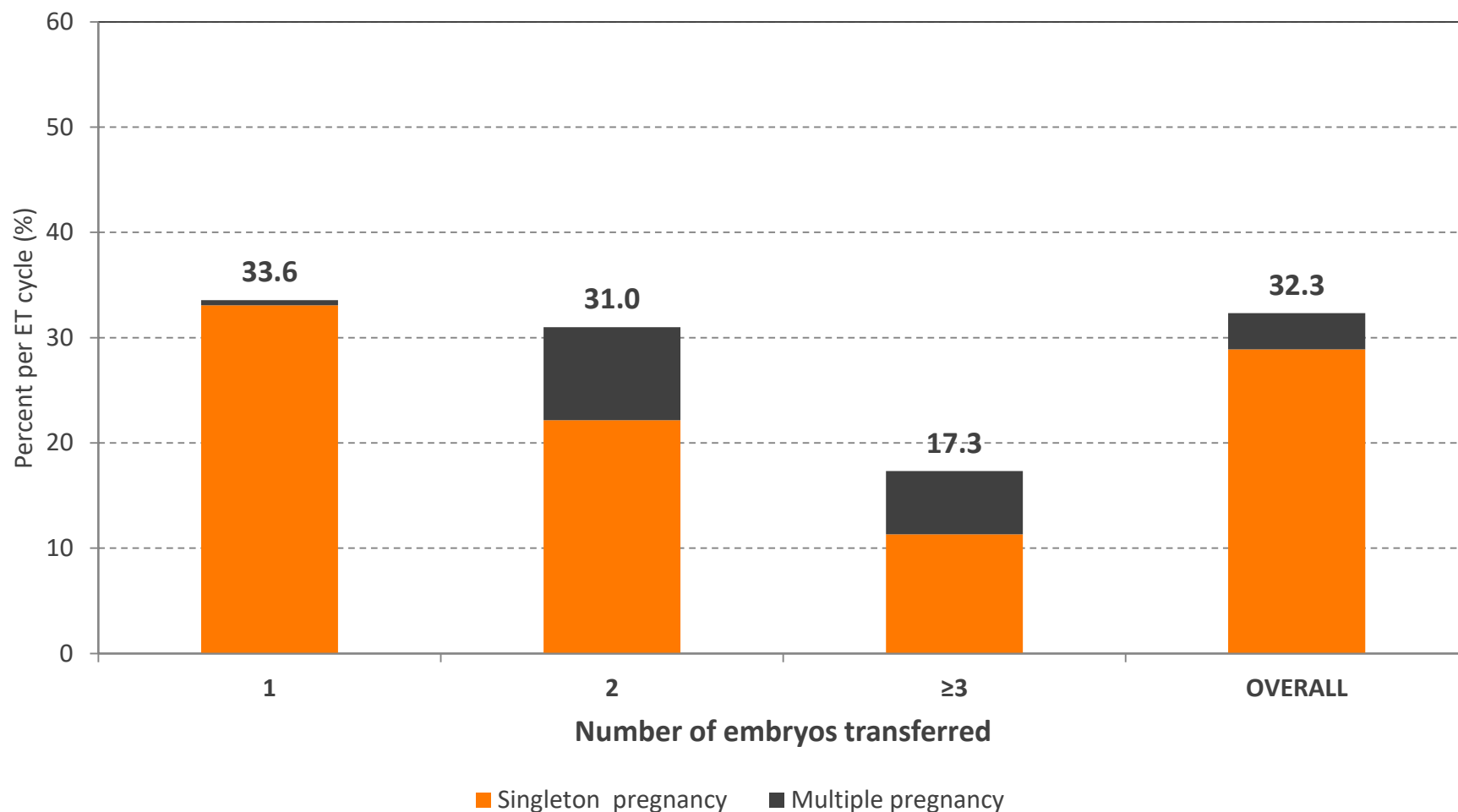


* Ongoing clinical pregnancy: clinical pregnancy with ≥ 1 fetal heart beat on ultrasound

† Singleton pregnancy: ongoing clinical pregnancy with only one fetal heart beat on ultrasound; multiple pregnancy: ongoing clinical pregnancy with >1 fetal heart beat

Proportion of cycles resulting in an ongoing clinical pregnancy

ART cycles using IVF – own oocytes, 2018



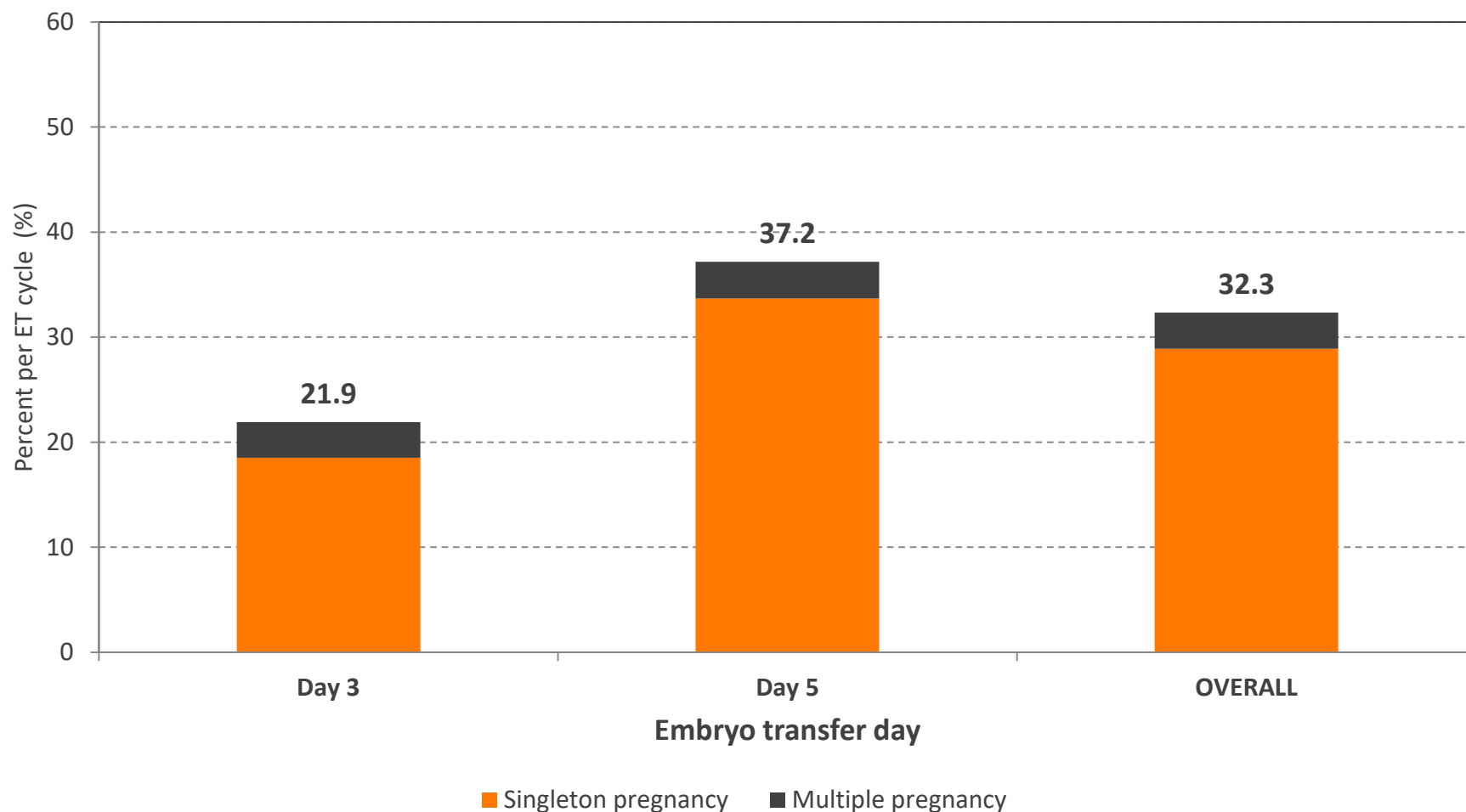
NOTE: In rare cases, a single embryo may divide and produce twins or triplets. For this reason, a small percentage of multiple pregnancies can result from a single embryo transfer

* Ongoing clinical pregnancy: clinical pregnancy with ≥1 fetal heart beat on ultrasound

† Singleton pregnancy: ongoing clinical pregnancy with only one fetal heart beat on ultrasound; multiple pregnancy: ongoing clinical pregnancy with >1 fetal heart beat

Proportion of cycles resulting in an ongoing clinical pregnancy

ART cycles using IVF – own oocytes, 2018



* Ongoing clinical pregnancy: clinical pregnancy with ≥ 1 fetal heart beat on ultrasound

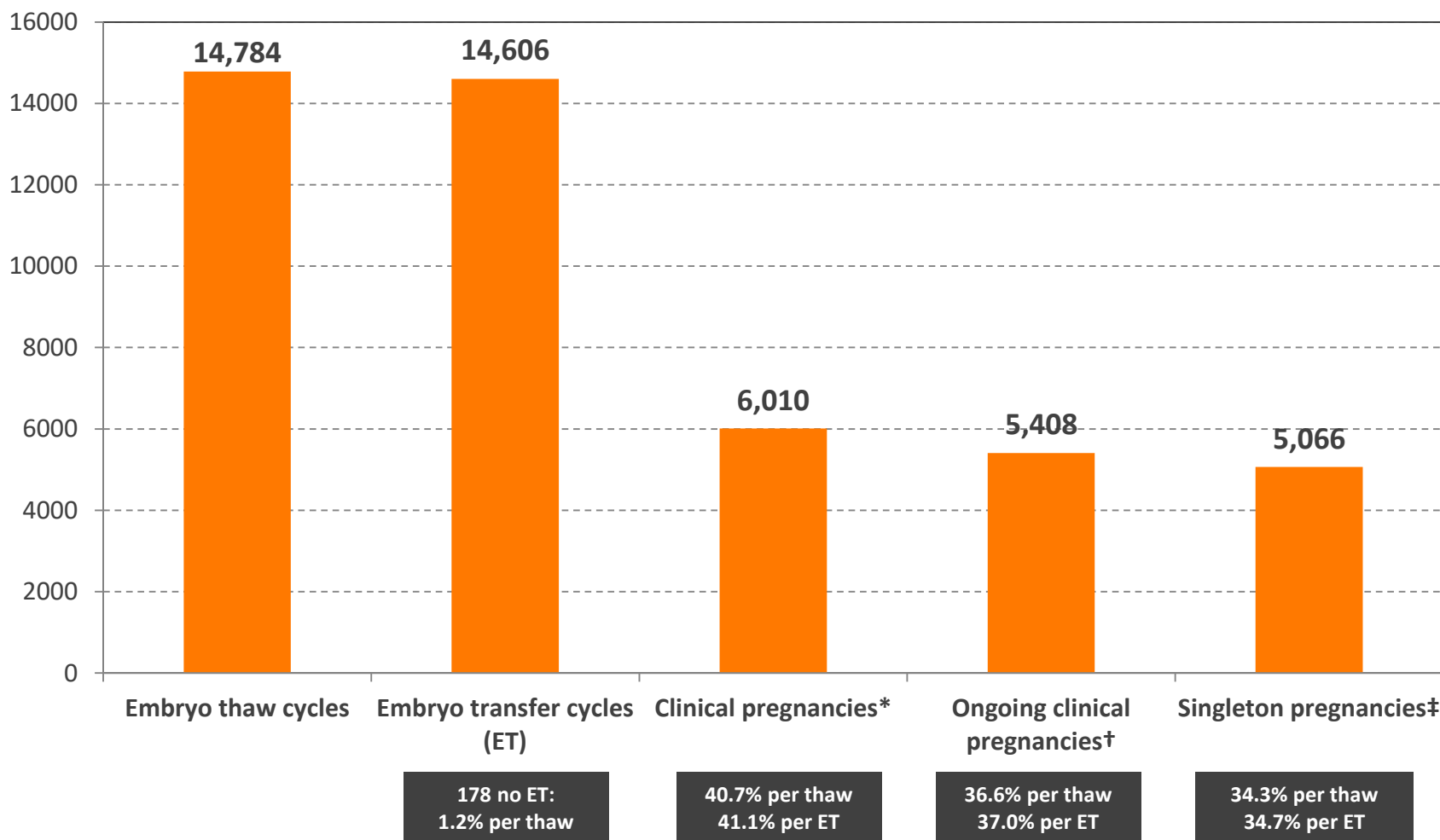
† Singleton pregnancy: ongoing clinical pregnancy with only one fetal heart beat on ultrasound; multiple pregnancy: ongoing clinical pregnancy with >1 fetal heart beat

TREATMENT CYCLES FOR 2018

ART cycles using FET – own oocytes

Stage of treatment and treatment outcomes

ART cycles using FET – own oocytes, 2018



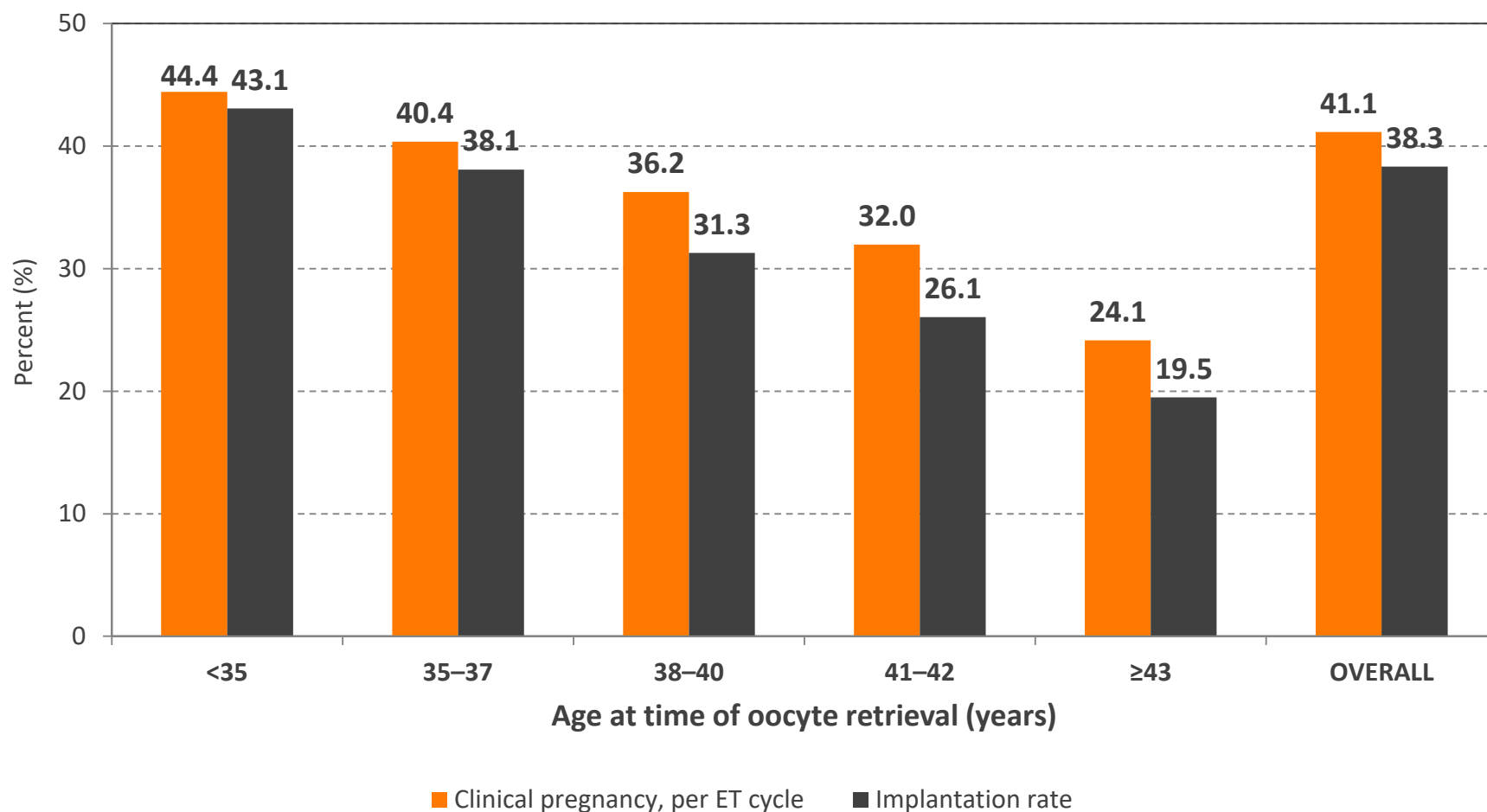
* Clinical pregnancy: clinical intrauterine, heterotopic, or ectopic pregnancy

† Ongoing clinical pregnancy: clinical pregnancy with ≥ 1 fetal heart beat on ultrasound

‡ Singleton pregnancy: ongoing clinical pregnancy with only one fetal heart beat on ultrasound

Clinical pregnancy and implantation rate

ART cycles using FET – own oocytes, 2018

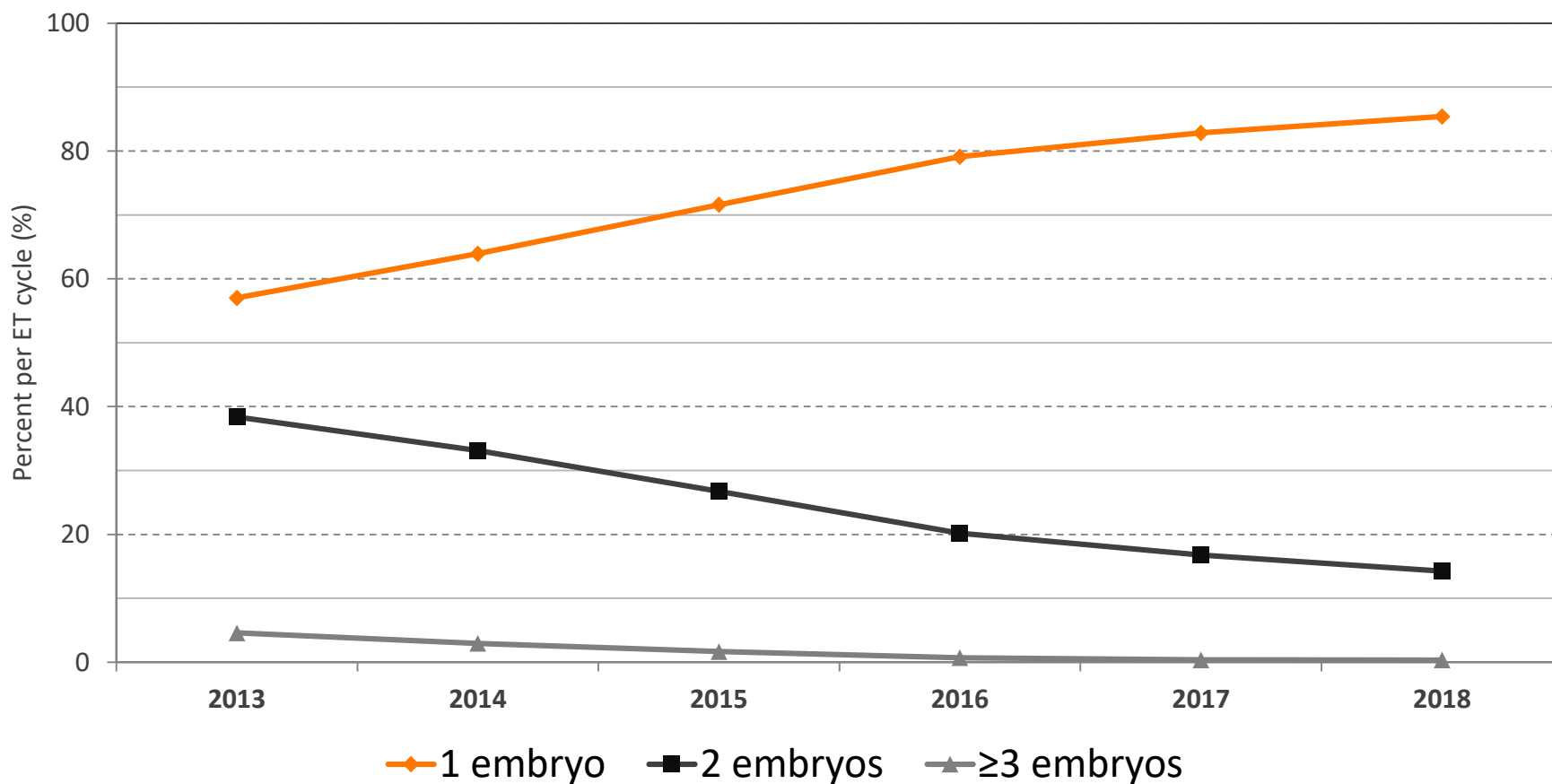


* Clinical pregnancy: clinical intrauterine, heterotopic, or ectopic pregnancy

† Implantation rate: number of gestational sacs observed on ultrasound, divided by the total number of embryos transferred

Number of embryos transferred, by year

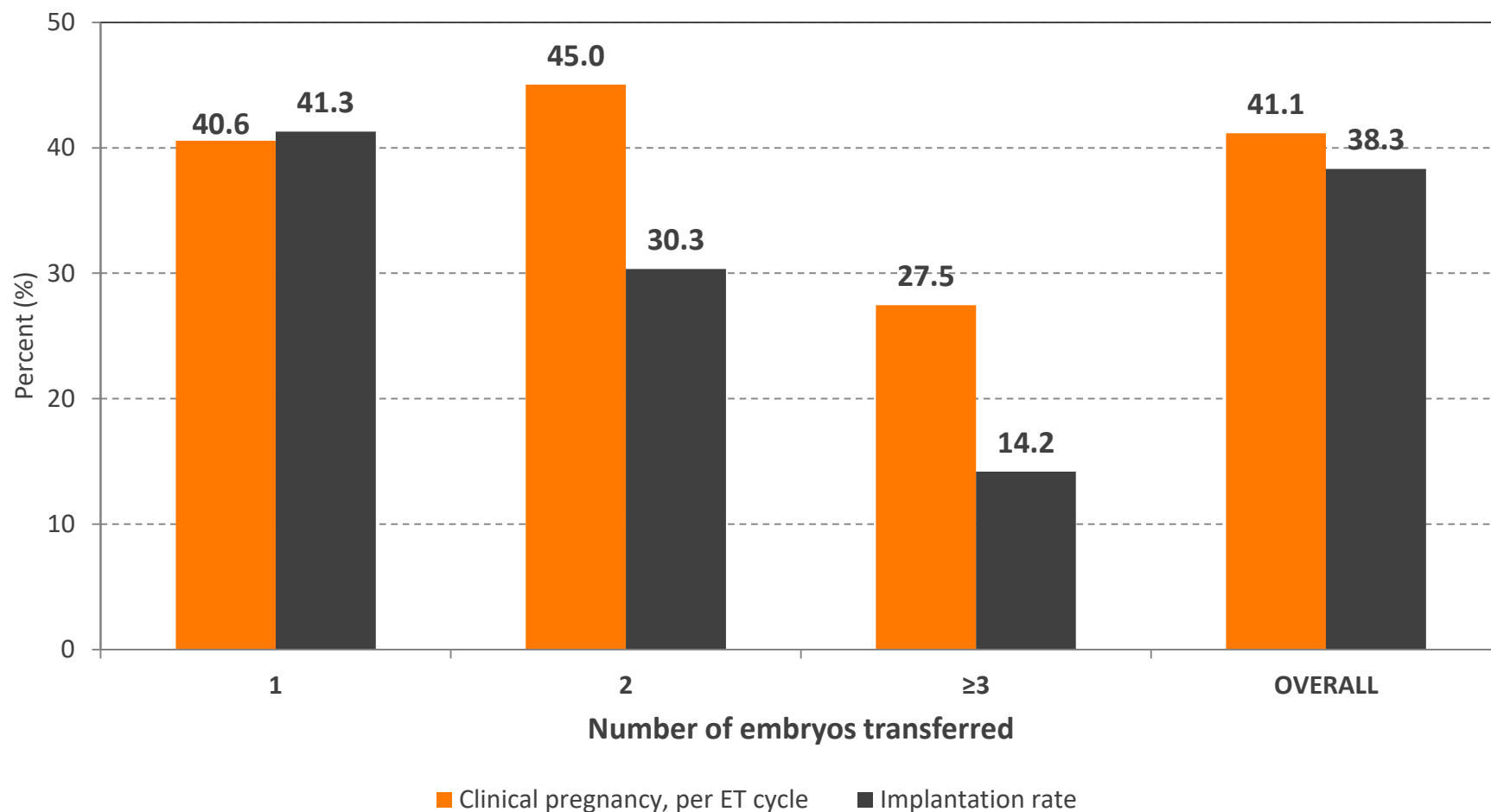
ART cycles using FET – own oocytes, 2018



* Excludes records with missing number of embryos transferred

Clinical pregnancy and implantation rate

ART cycles using FET – own oocytes, 2018

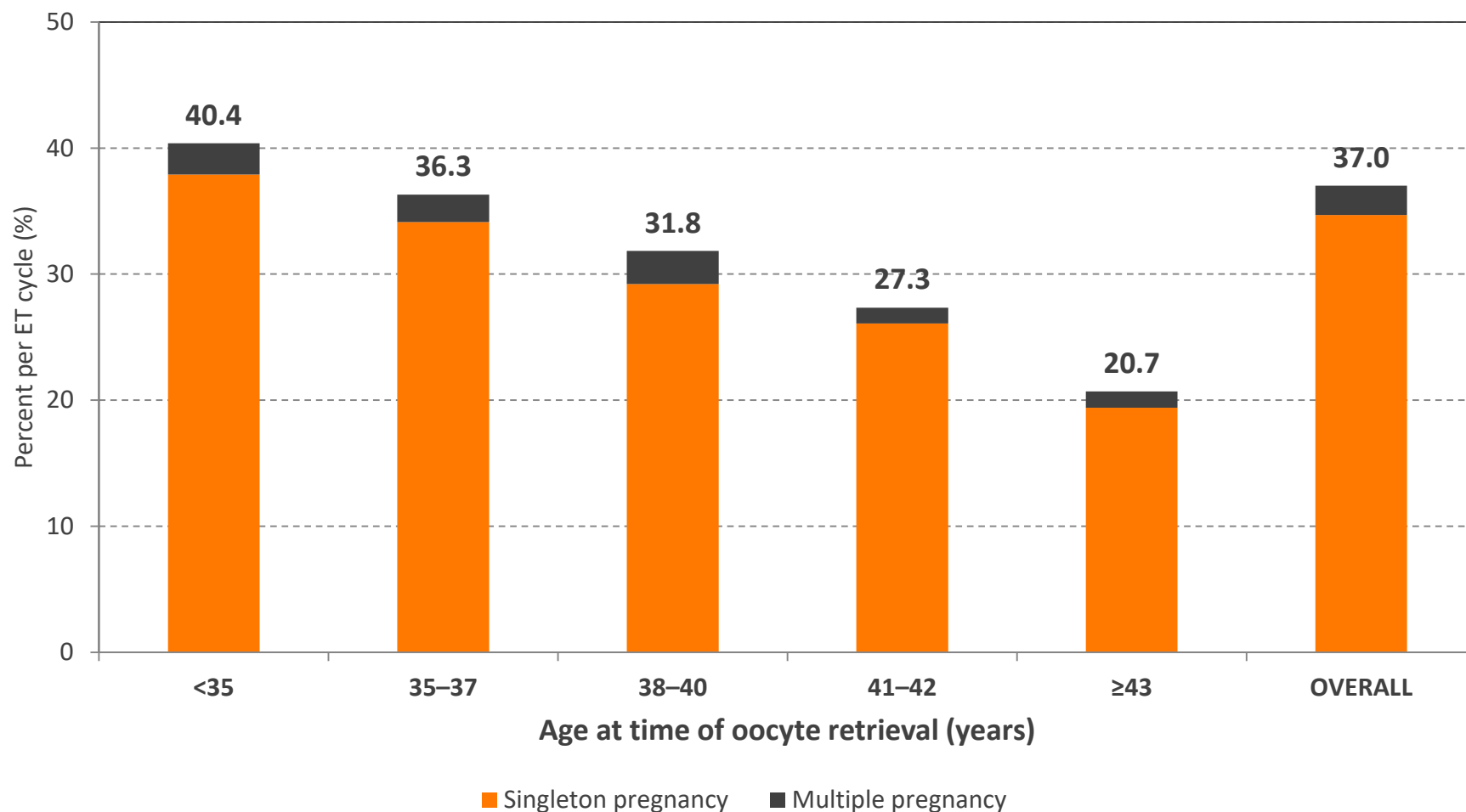


* Clinical pregnancy: clinical intrauterine, heterotopic, or ectopic pregnancy

† Implantation rate: number of gestational sacs observed on ultrasound, divided by the total number of embryos transferred

Proportion of cycles resulting in an ongoing clinical pregnancy

ART cycles using FET – own oocytes, 2018

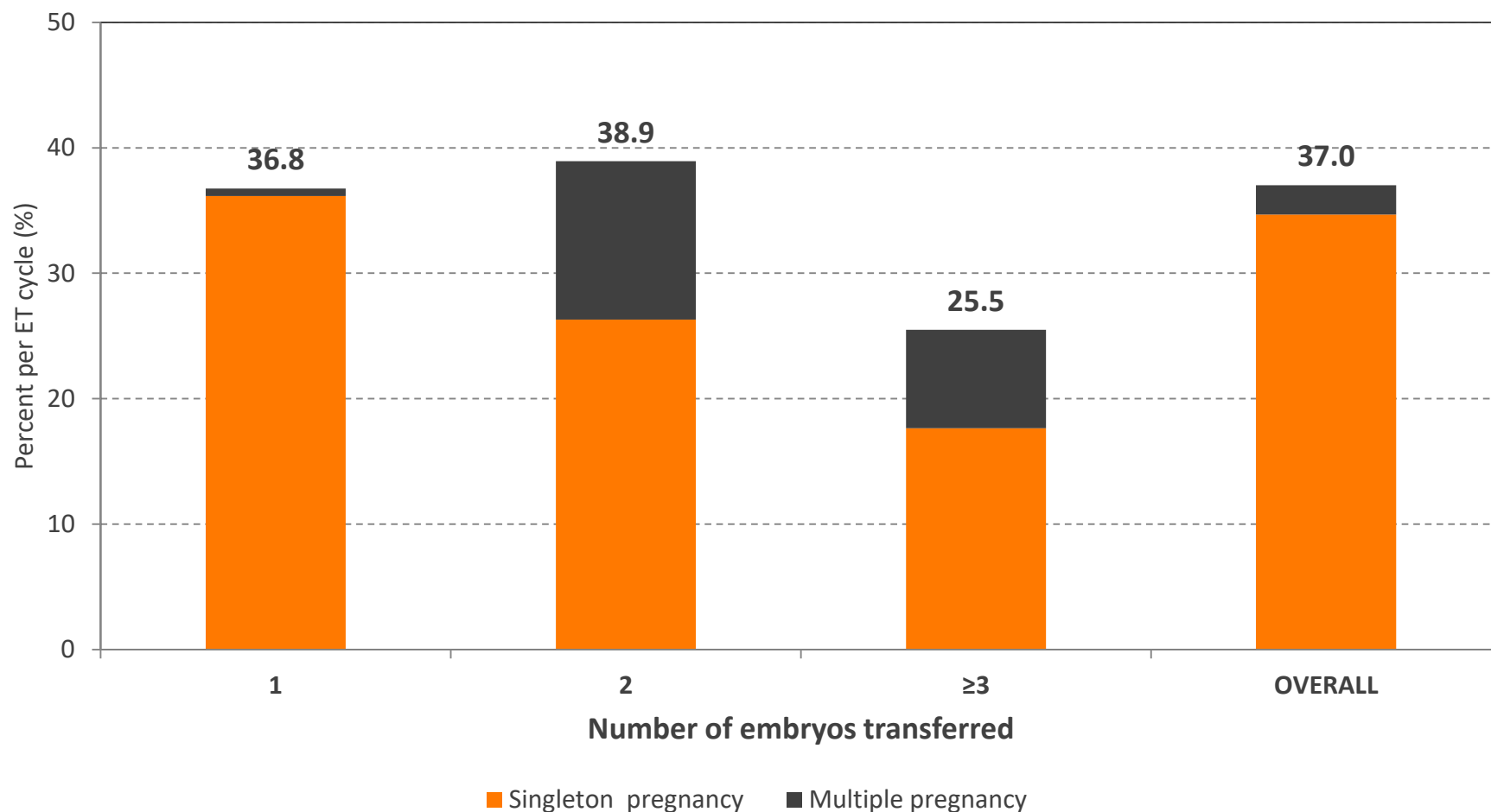


* Ongoing clinical pregnancy: clinical pregnancy with ≥ 1 fetal heart beat on ultrasound

† Singleton pregnancy: ongoing clinical pregnancy with only one fetal heart beat on ultrasound; multiple pregnancy: ongoing clinical pregnancy with >1 fetal heart beat

Proportion of cycles resulting in an ongoing clinical pregnancy

ART cycles using FET – own oocytes, 2018



NOTE: In rare cases, a single embryo may divide and produce twins or triplets. For this reason, a small percentage of multiple pregnancies can result from a single embryo transfer

* Ongoing clinical pregnancy: clinical pregnancy with ≥1 fetal heart beat on ultrasound

† Singleton pregnancy: ongoing clinical pregnancy with only one fetal heart beat on ultrasound; multiple pregnancy: ongoing clinical pregnancy with >1 fetal heart beat

PRIMARY TRANSFER PREGNANCY RATE

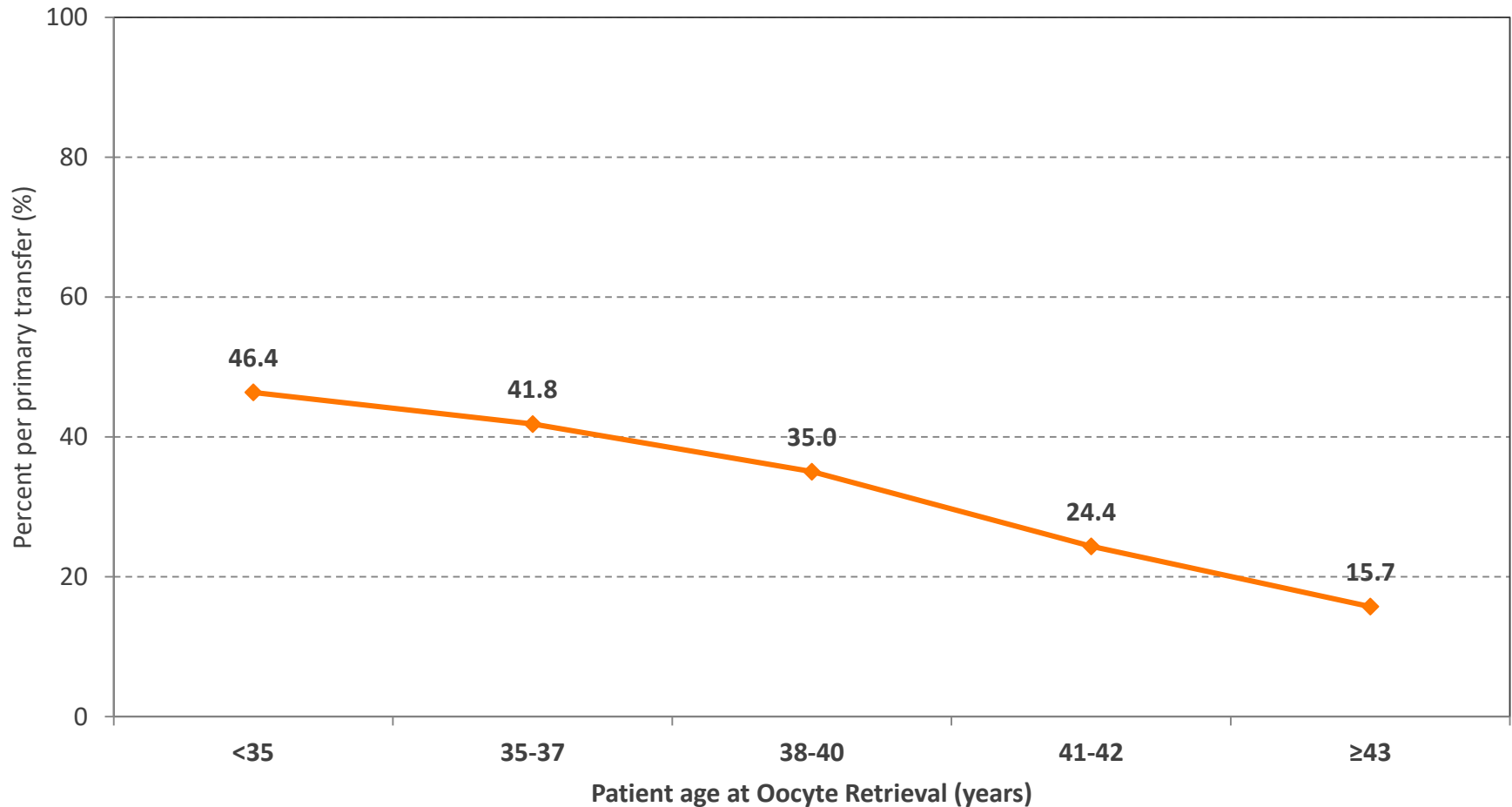
Primary transfer rate

- **Cohort:**

- Patients with first IVF cycle in CARTR Plus and no documented prior treatment cycle using own oocytes
- The first treatment cycle with an embryo transfer
 - IVF with own oocytes
 - FET with own oocytes
- **Rate per patient:** treatment cycle outcomes can be linked for a patient throughout the database

Primary transfer clinical pregnancy rate per patient

IVF and FET – own oocytes, 2013 – 2018

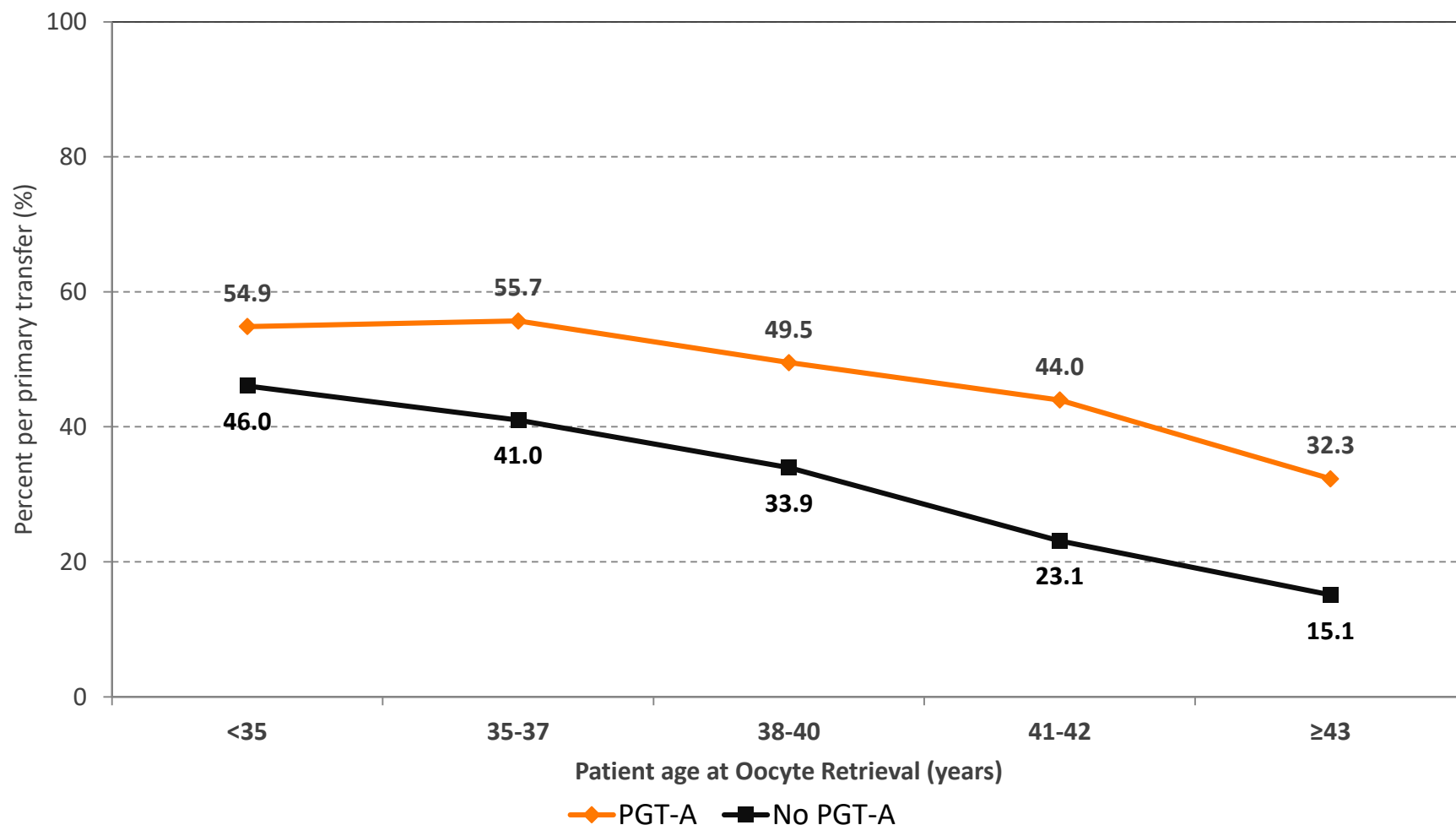


* Own oocytes exclusively

† Clinical pregnancy: clinical intrauterine, heterotopic, or ectopic pregnancy

Primary transfer clinical pregnancy rate per patient

IVF and FET – own oocytes, 2013 – 2018

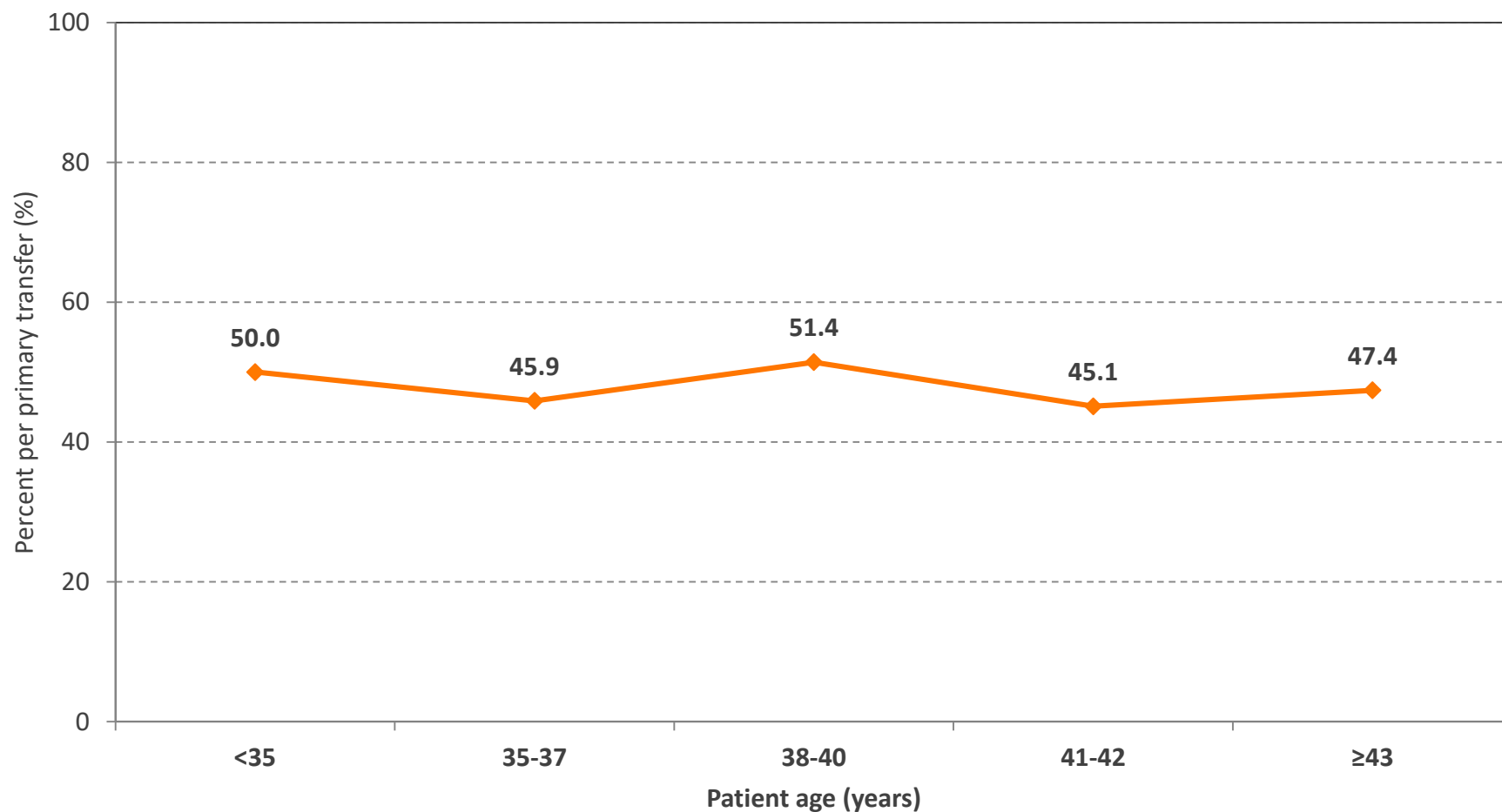


* Own oocytes exclusively

† Clinical pregnancy: clinical intrauterine, heterotopic, or ectopic pregnancy

Primary transfer clinical pregnancy rate per patient

IVF and FET – donor oocytes, 2013 – 2018



* Any donor oocytes

† Clinical pregnancy: clinical intrauterine, heterotopic, or ectopic pregnancy

CUMULATIVE PREGNANCY RATE

Cumulative pregnancy rate

- **Definition:**

- The number of clinical pregnancies resulting from one or more ART cycles, including the cycle when fresh embryos are transferred and all related subsequent frozen/thawed embryo transfer cycles if the fresh embryo transfer did not result in a pregnancy

- **Rationale:**

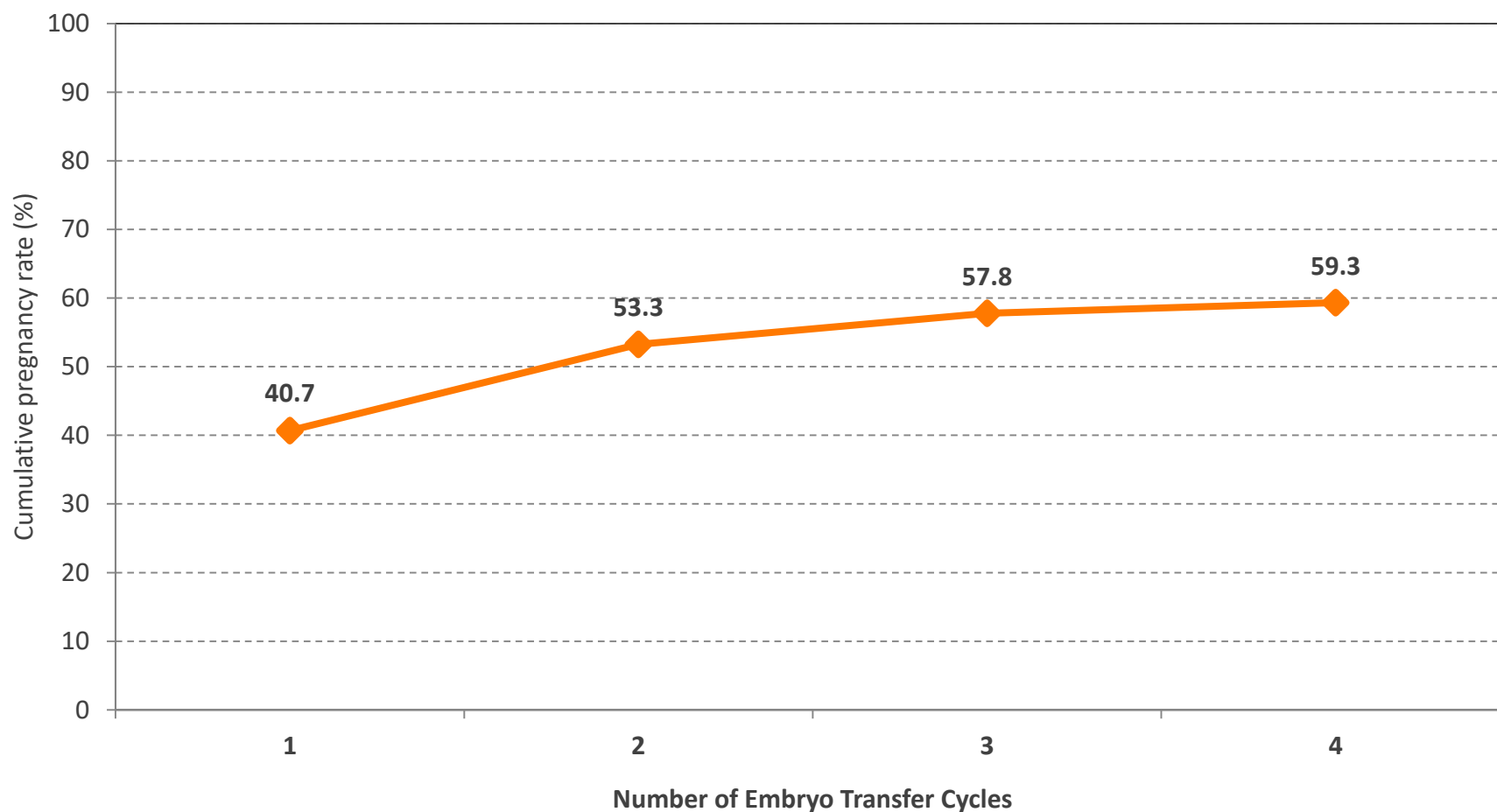
- Estimates cumulative success with ongoing treatment, rather than success per individual stage of the treatment process

Cumulative pregnancy rate

- **Several options for calculation:**
 - **Per patient:** treatment cycle outcomes can be linked for a patient throughout the database
 - **Per batch of oocytes collected:** treatment cycles that used frozen oocytes or embryos can be linked to the IVF cycle where the oocytes were collected

Cumulative pregnancy rate, per patient

IVF and FET – own oocytes, 2013 – 2018

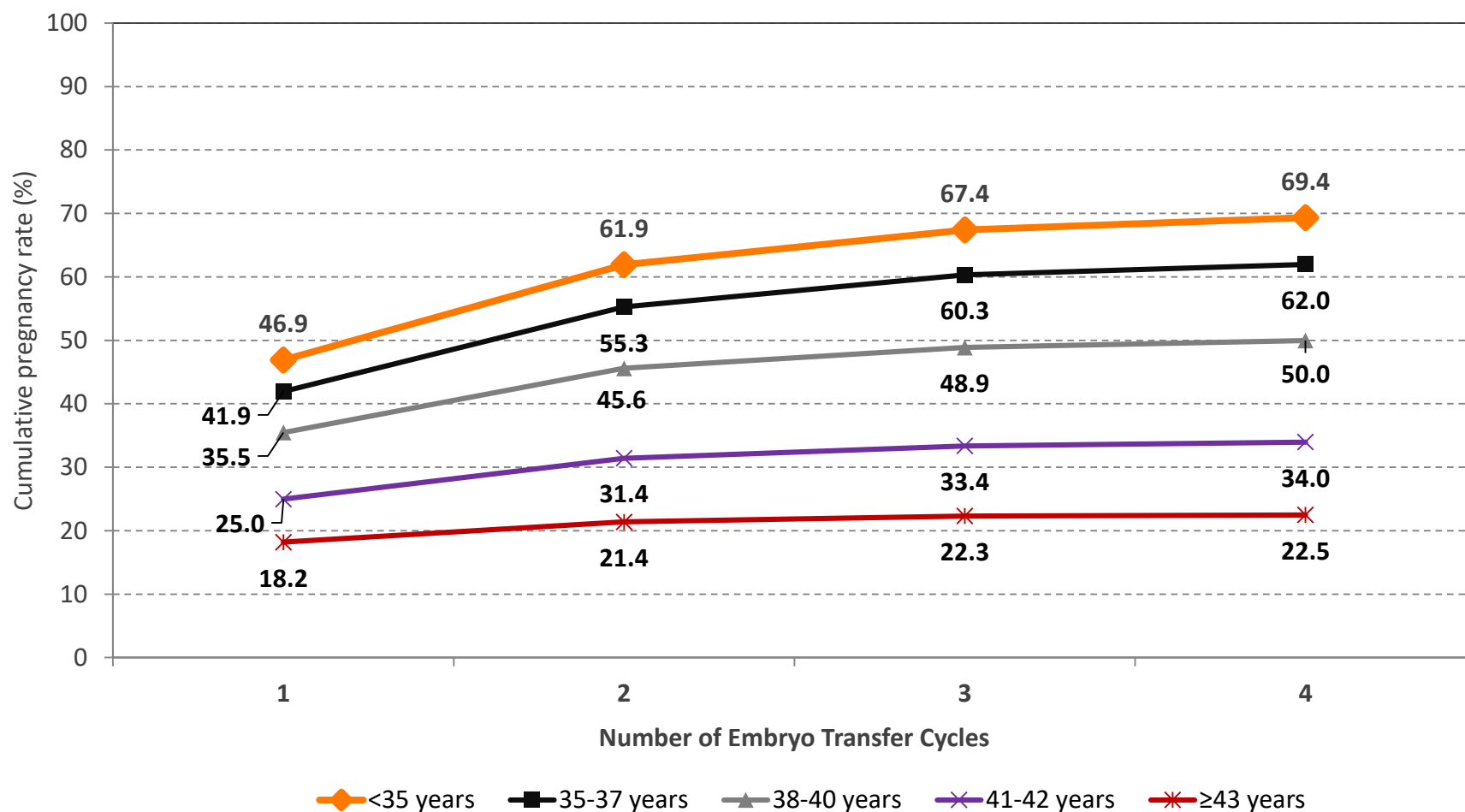


* Own oocytes exclusively

† Clinical pregnancy: clinical intrauterine, heterotopic, or ectopic pregnancy

Cumulative pregnancy rate, per patient, by patient age

IVF and FET – own oocytes, 2013 – 2018

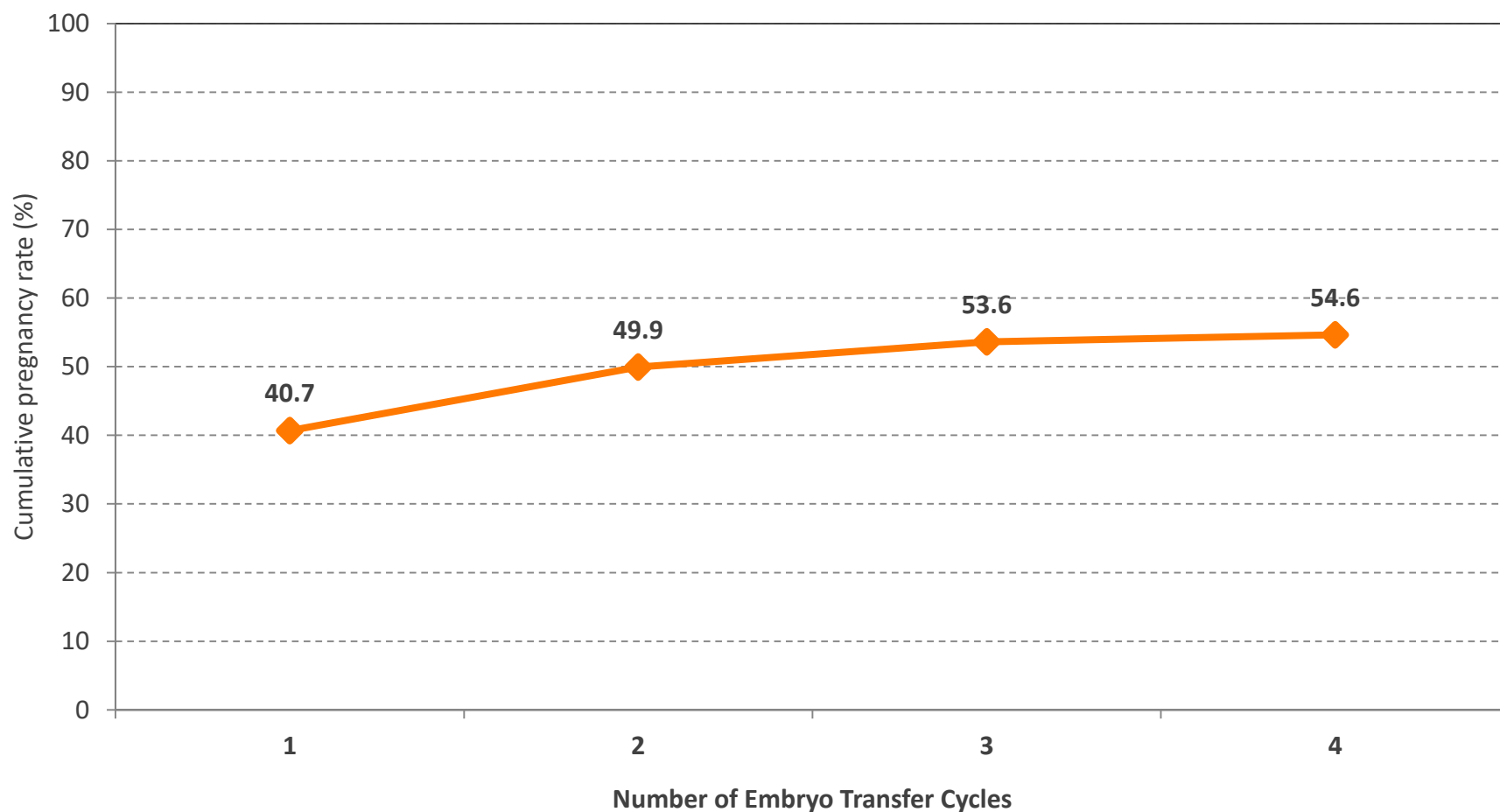


* Own oocytes exclusively

† Clinical pregnancy: clinical intrauterine, heterotopic, or ectopic pregnancy

Cumulative pregnancy rate, per patient, 1 year follow-up

IVF and FET – own oocytes, 2013 – 2018

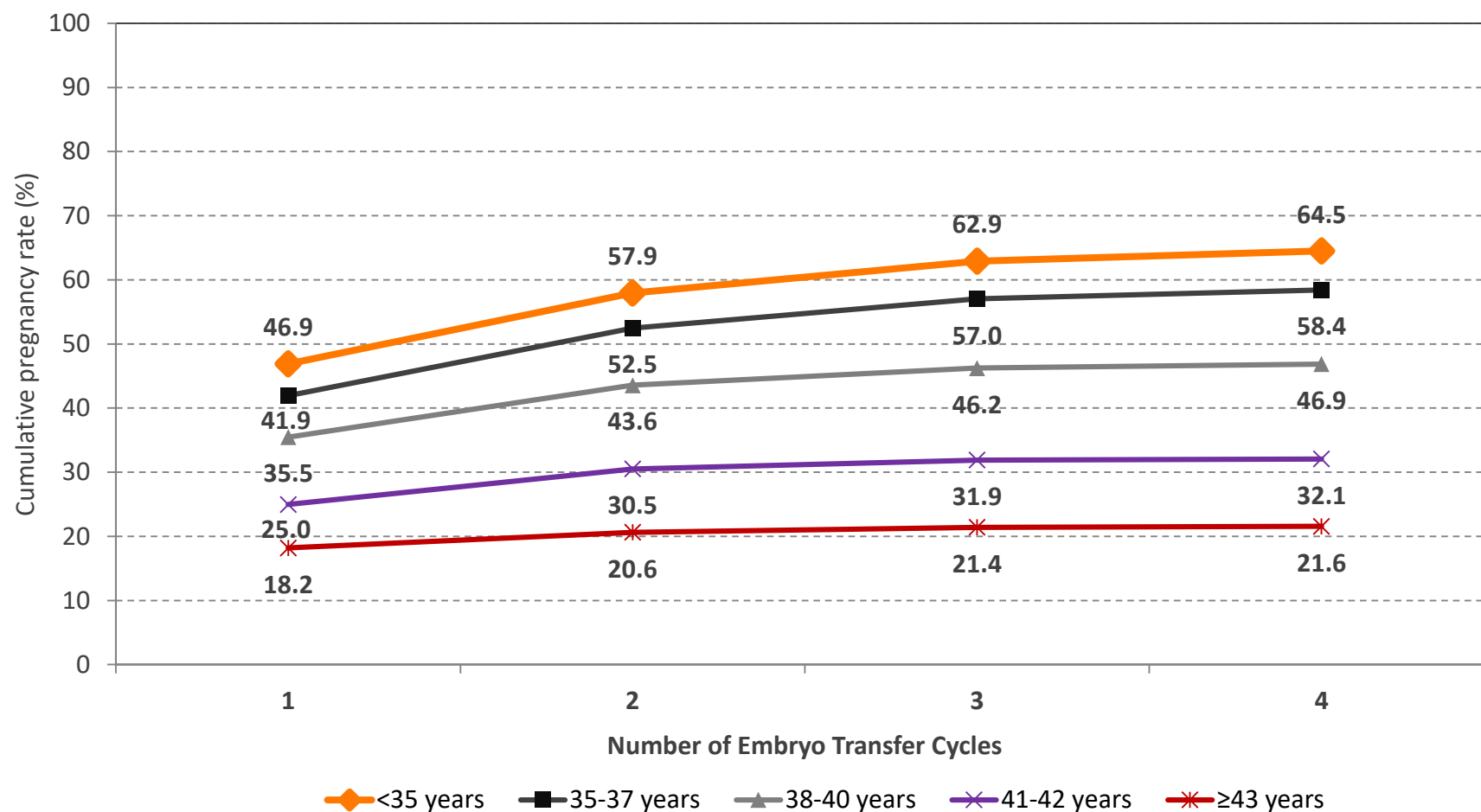


* Own oocytes exclusively

† Clinical pregnancy: clinical intrauterine, heterotopic, or ectopic pregnancy

Cumulative pregnancy rate, per patient, 1 year follow-up by patient age

IVF and FET – own oocytes, 2013 – 2018

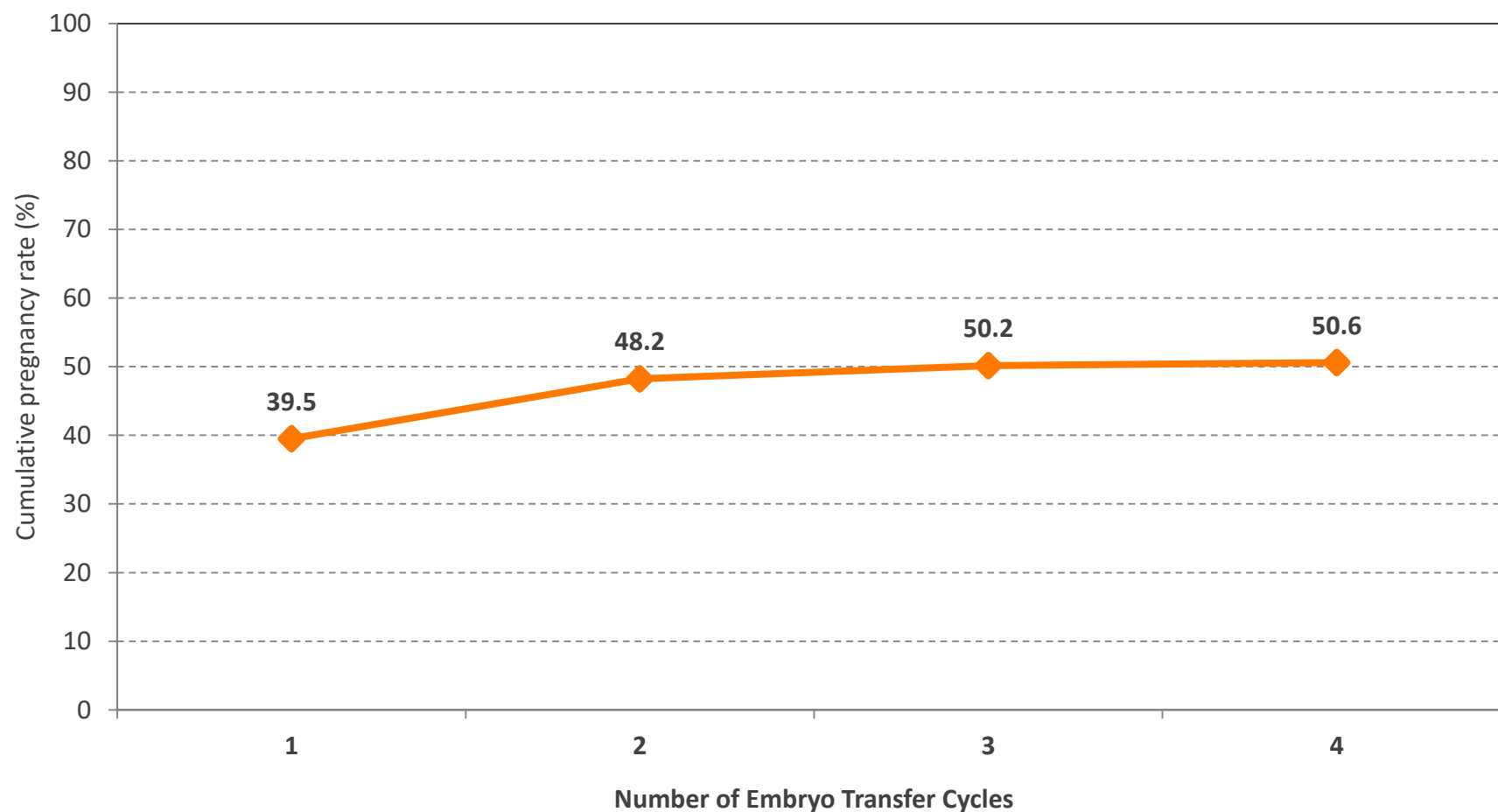


* Own oocytes exclusively

† Clinical pregnancy: clinical intrauterine, heterotopic, or ectopic pregnancy

Cumulative pregnancy rate, per batch

IVF and FET – own oocytes, 2013 – 2018

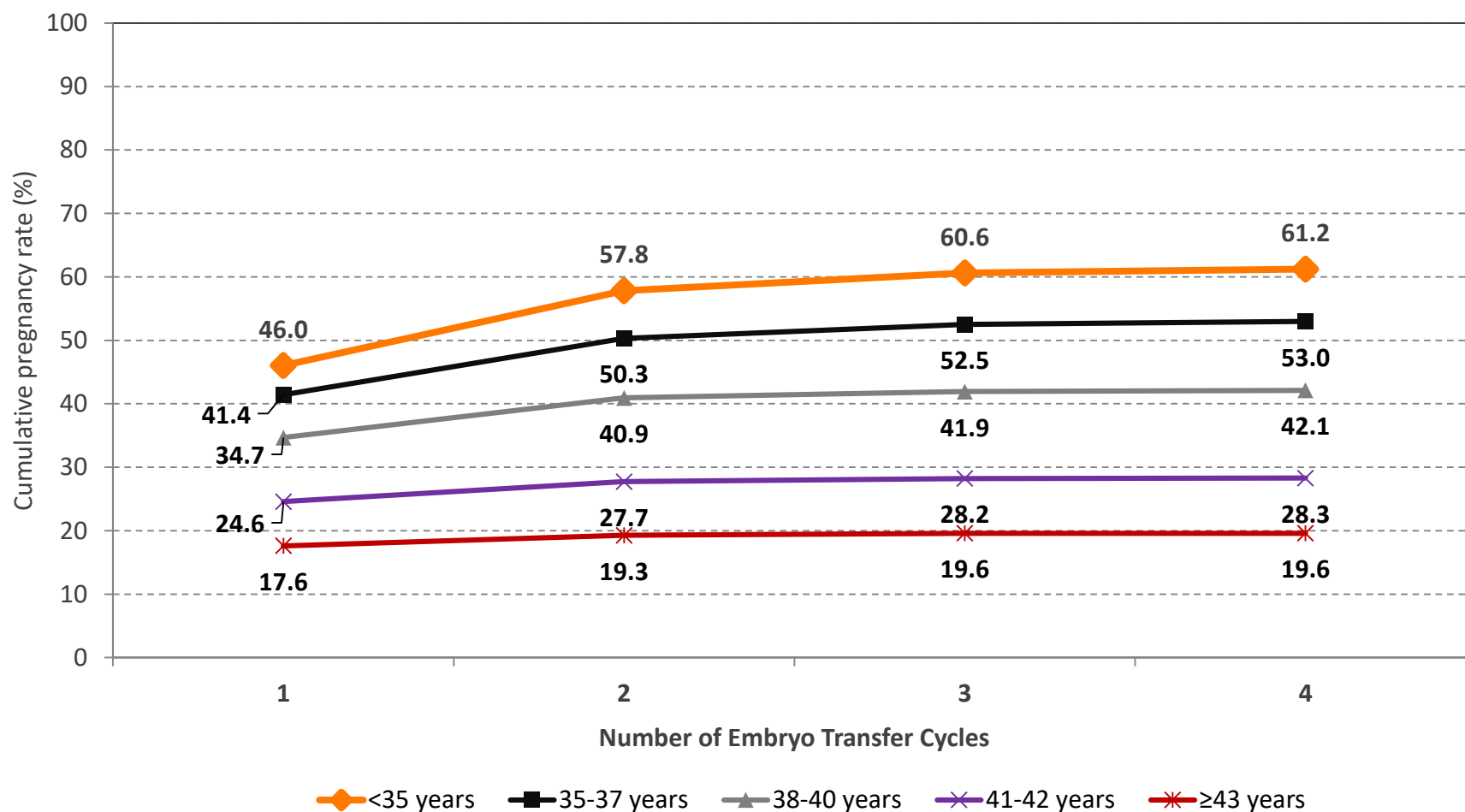


* Own oocytes exclusively

† Clinical pregnancy: clinical intrauterine, heterotopic, or ectopic pregnancy

Cumulative pregnancy rate, per batch, by patient age

IVF and FET – own oocytes, 2013 – 2018

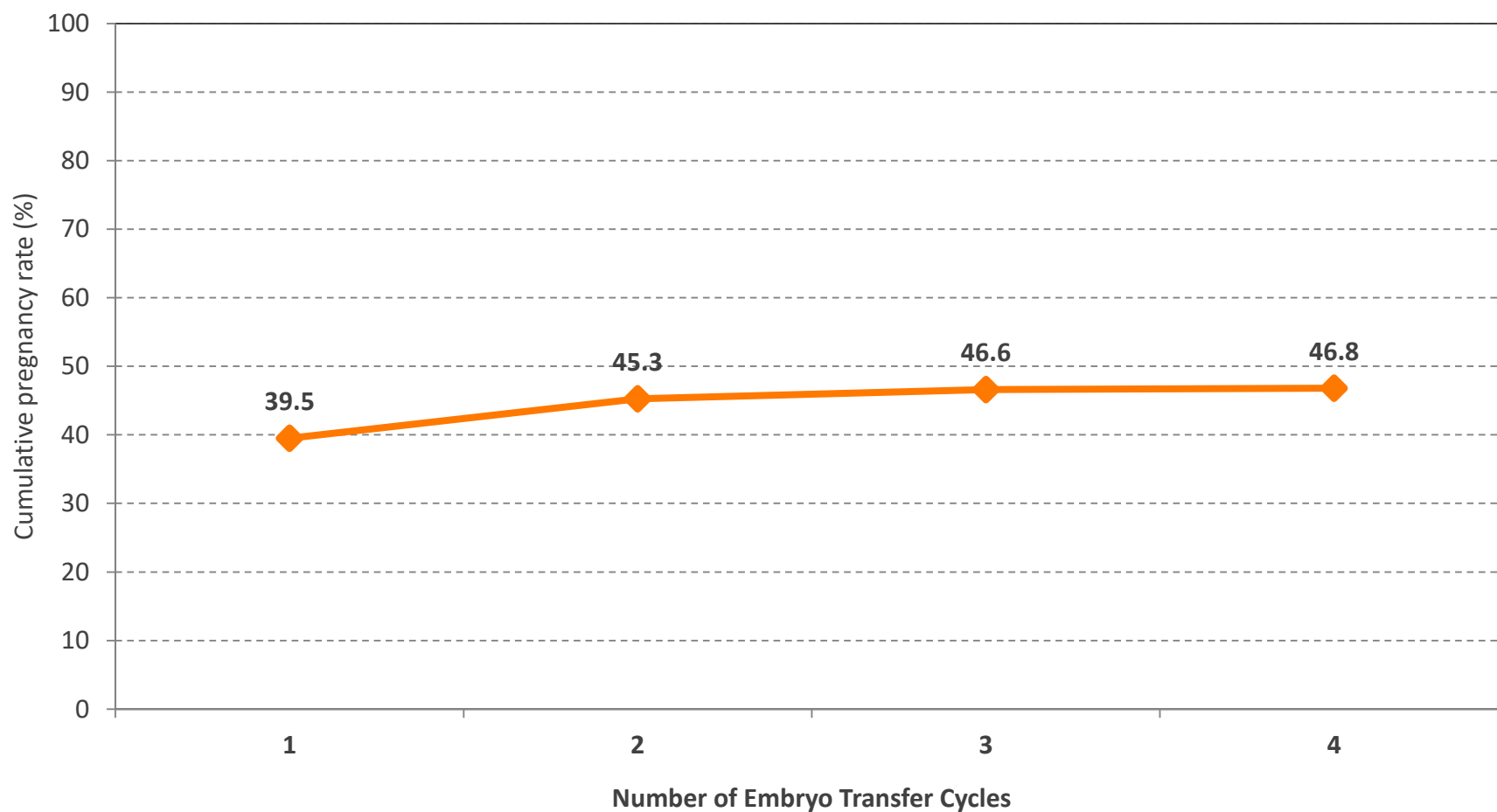


* Own oocytes exclusively

† Clinical pregnancy: clinical intrauterine, heterotopic, or ectopic pregnancy

Cumulative pregnancy rate, per batch, 1 year follow-up

IVF and FET – own oocytes, 2013 to 2018

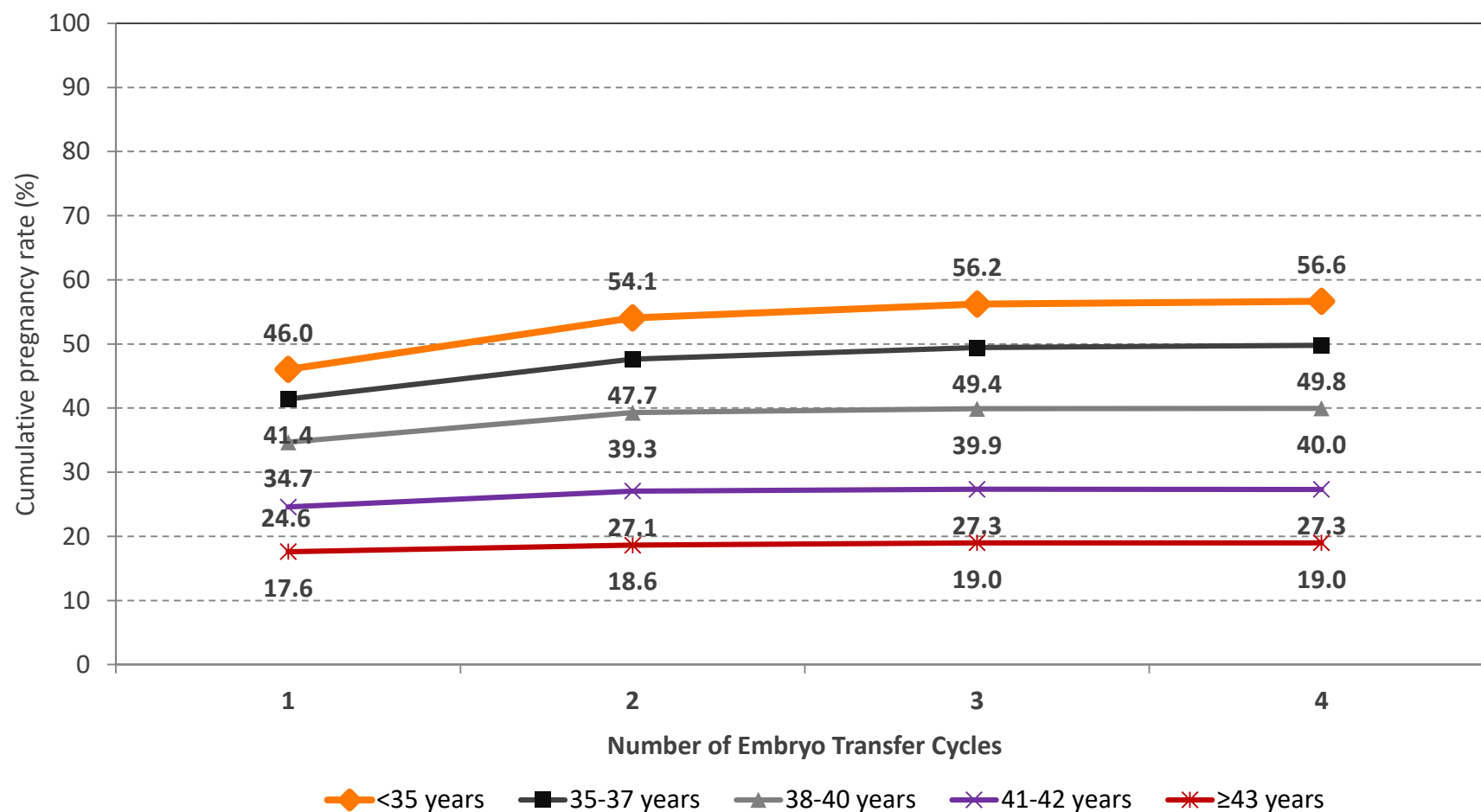


* Own oocytes exclusively

† Clinical pregnancy: clinical intrauterine, heterotopic, or ectopic pregnancy

Cumulative pregnancy rate, per batch, 1 year follow-up by patient age

IVF and FET – own oocytes, 2013 to 2018



* Own oocytes exclusively

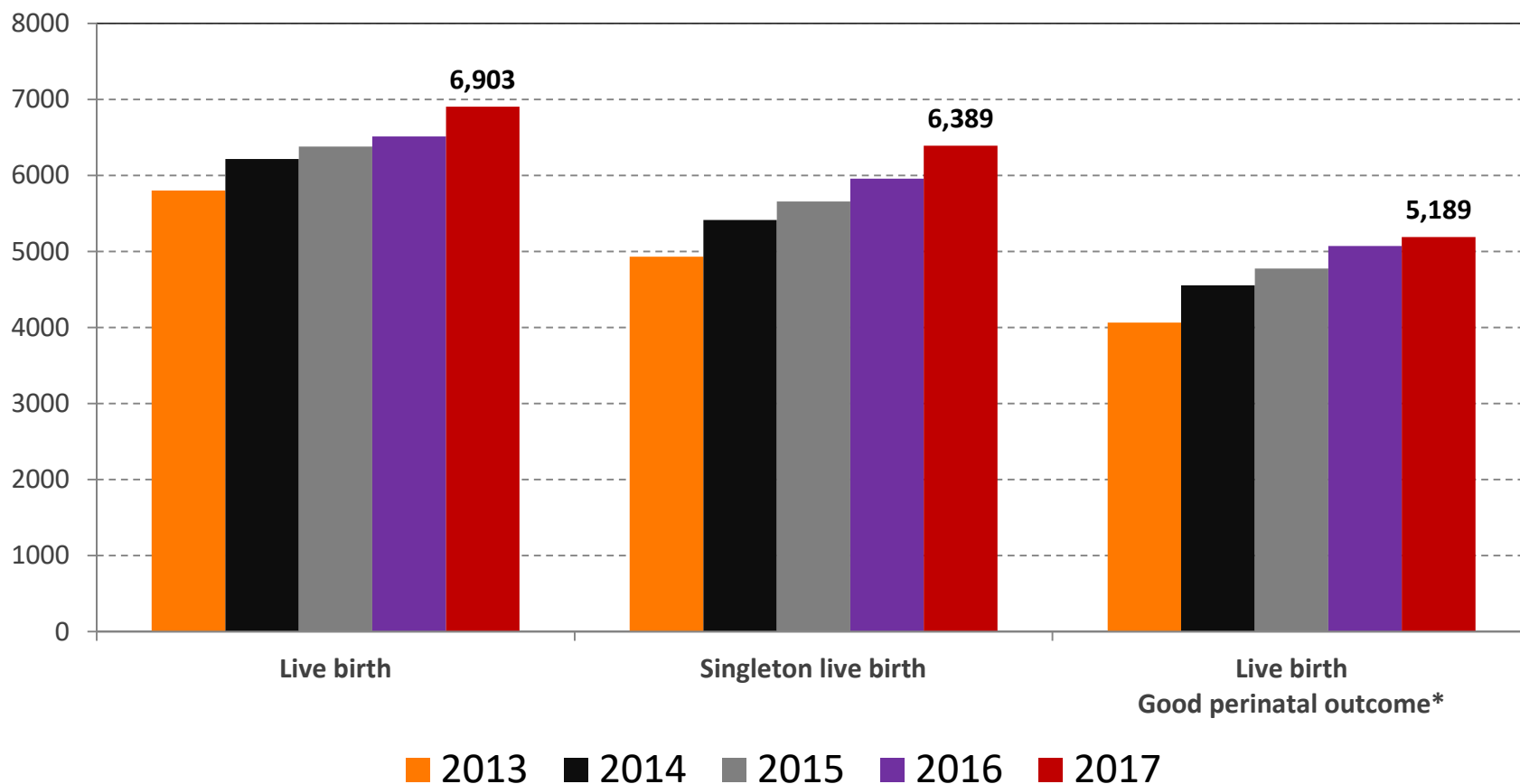
† Clinical pregnancy: clinical intrauterine, heterotopic, or ectopic pregnancy

BIRTH OUTCOMES FOR 2017

All ART treatment cycles (fresh and frozen)

Birth outcomes

All ART treatment cycles (fresh and frozen), 2013-2017

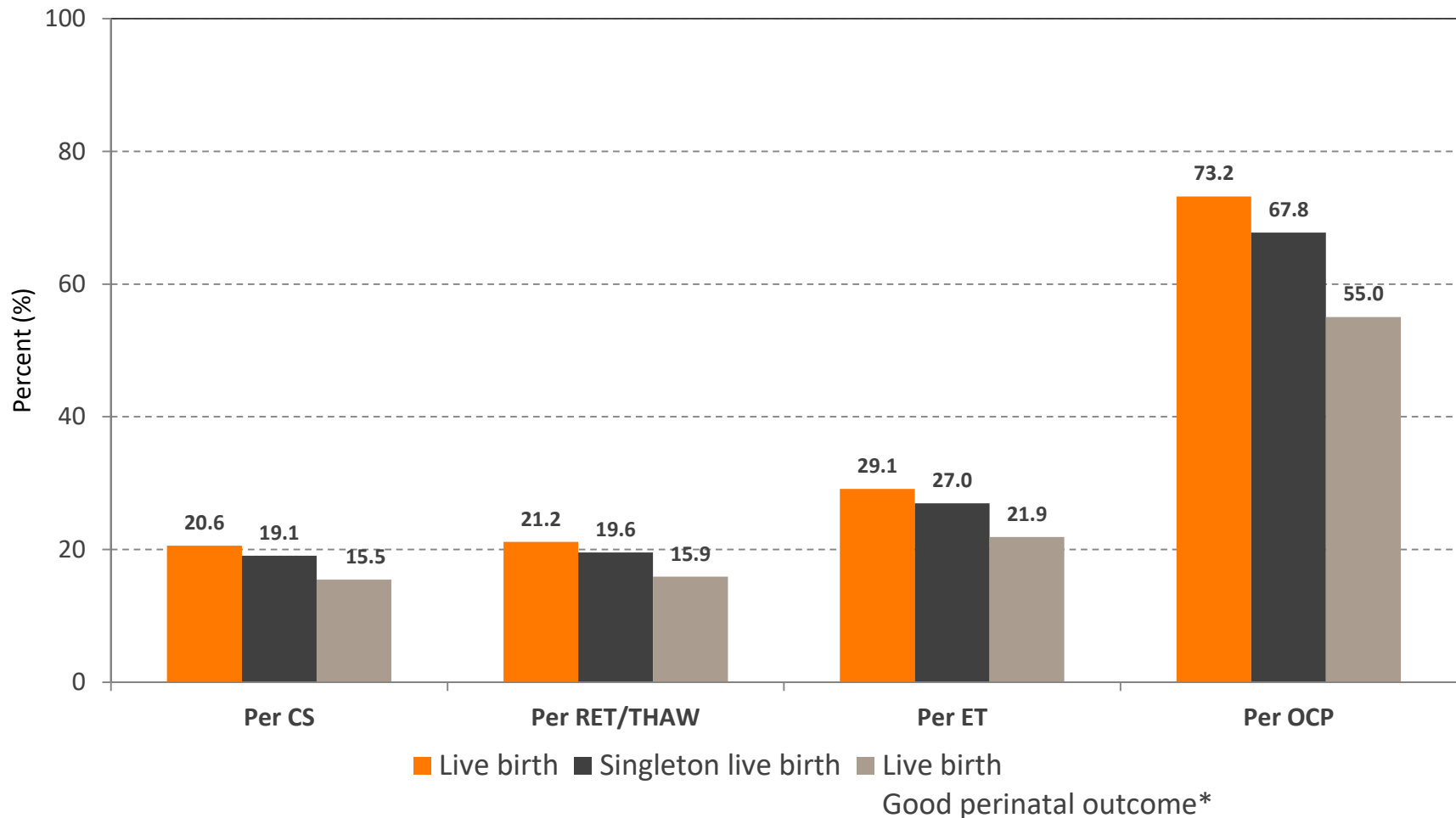


* Good perinatal outcome: singleton live birth at ≥ 37 weeks' gestation and a birth weight $\geq 2,500$ grams

† Cycle starts, oocyte retrievals/thaws and embryo transfers with an unknown birth outcome were removed from the denominator (n=501)

Birth outcome rates

All ART treatment cycles (fresh and frozen), 2017



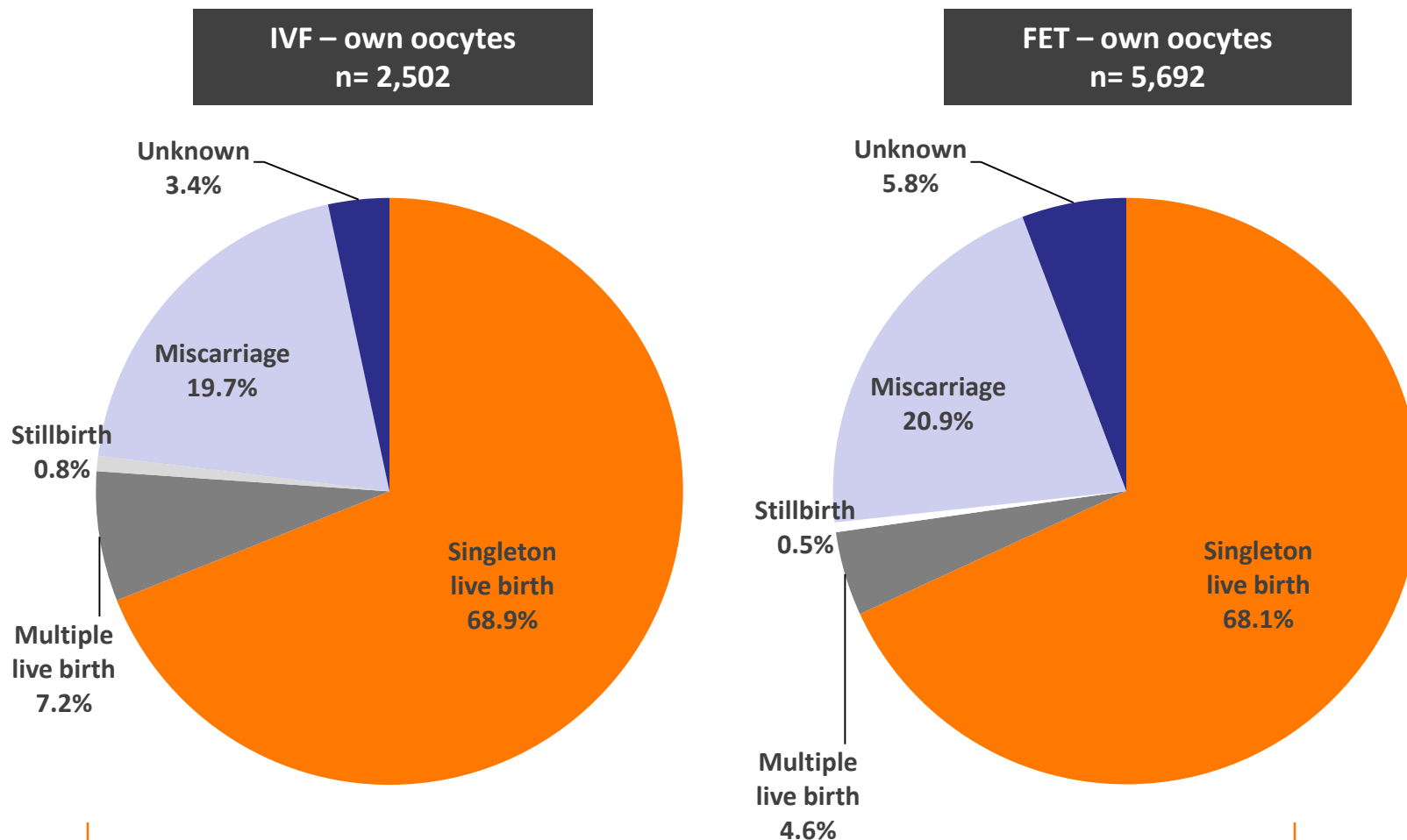
* Good perinatal outcome: singleton live birth at ≥ 37 weeks' gestation and a birth weight $\geq 2,500$ grams

OCP - Ongoing clinical pregnancy: a clinical pregnancy with documentation of at least one fetal heart beat on ultrasound

Cycle starts, oocyte retrievals/thaws and embryo transfers with an unknown birth outcome were removed from the denominator (n=501)

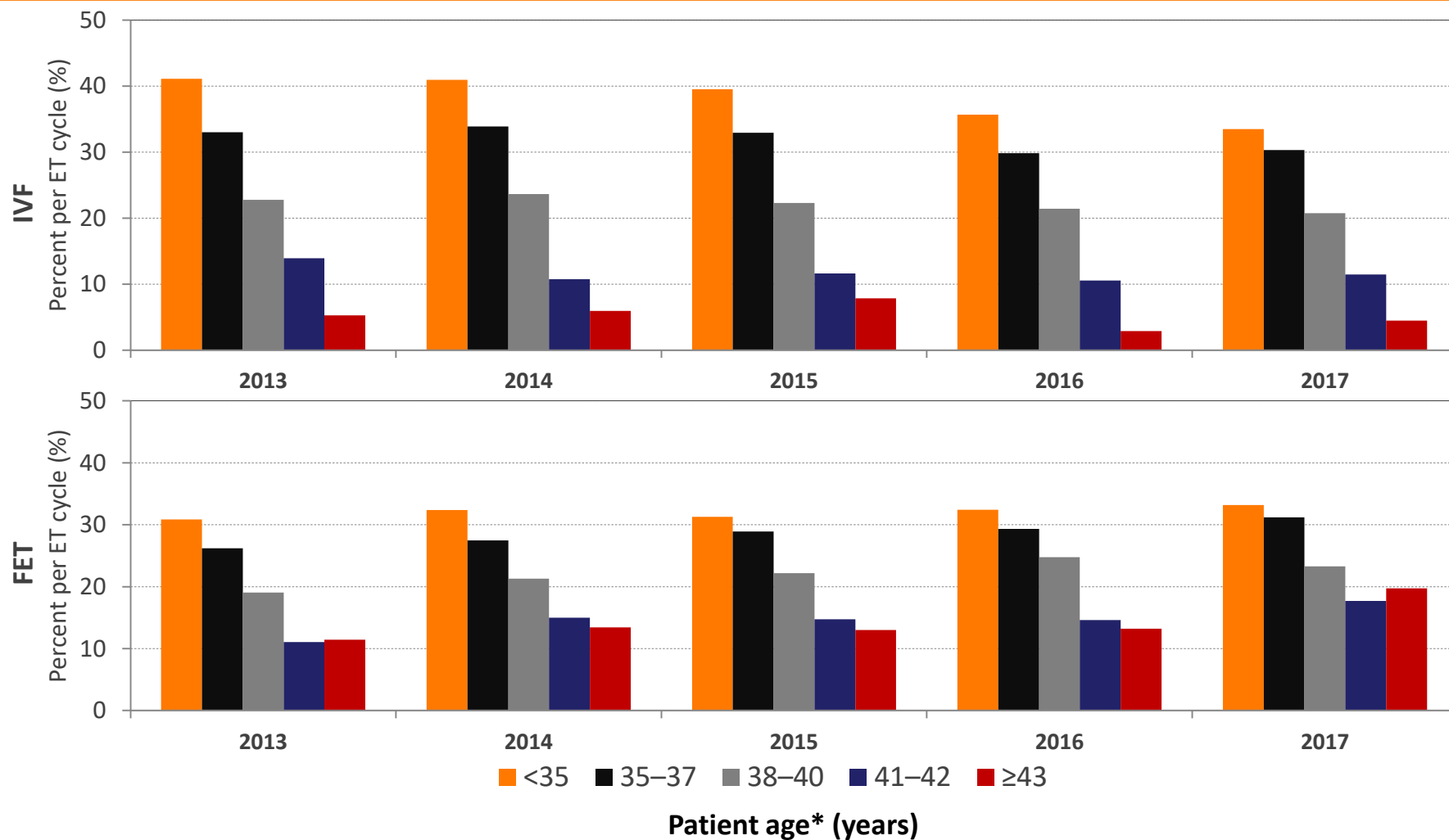
Distribution of birth outcomes among ongoing clinical pregnancies

ART cycles using IVF and FET – own oocytes, 2017



Proportion of Live Births

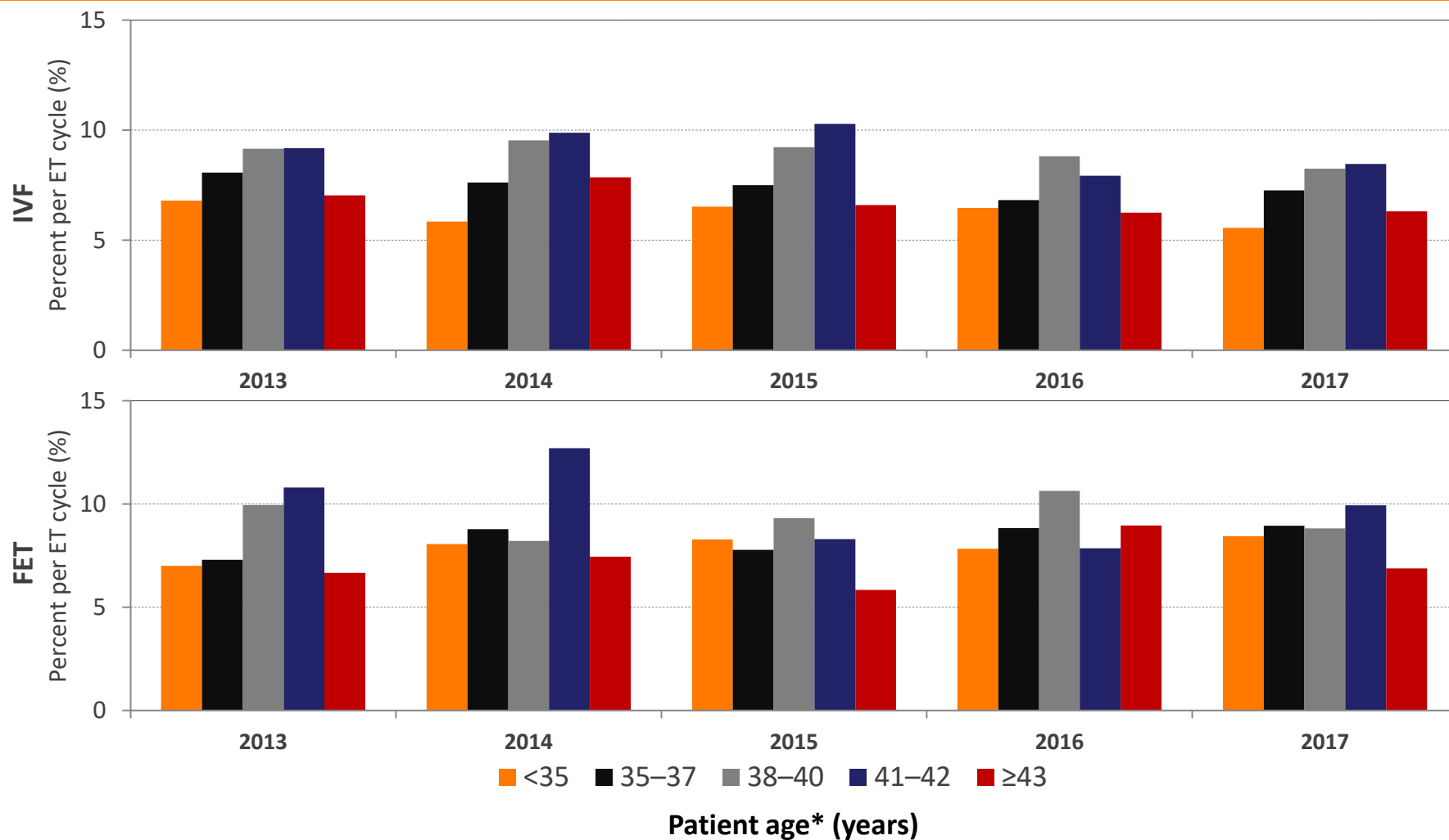
IVF and FET – own oocytes, 2013 to 2017



* Patient age at cycle start for IVF cycles and patient age at time of oocyte retrieval for FET cycles

Proportion of Miscarriages

IVF and FET – own oocytes, 2013 – 2017

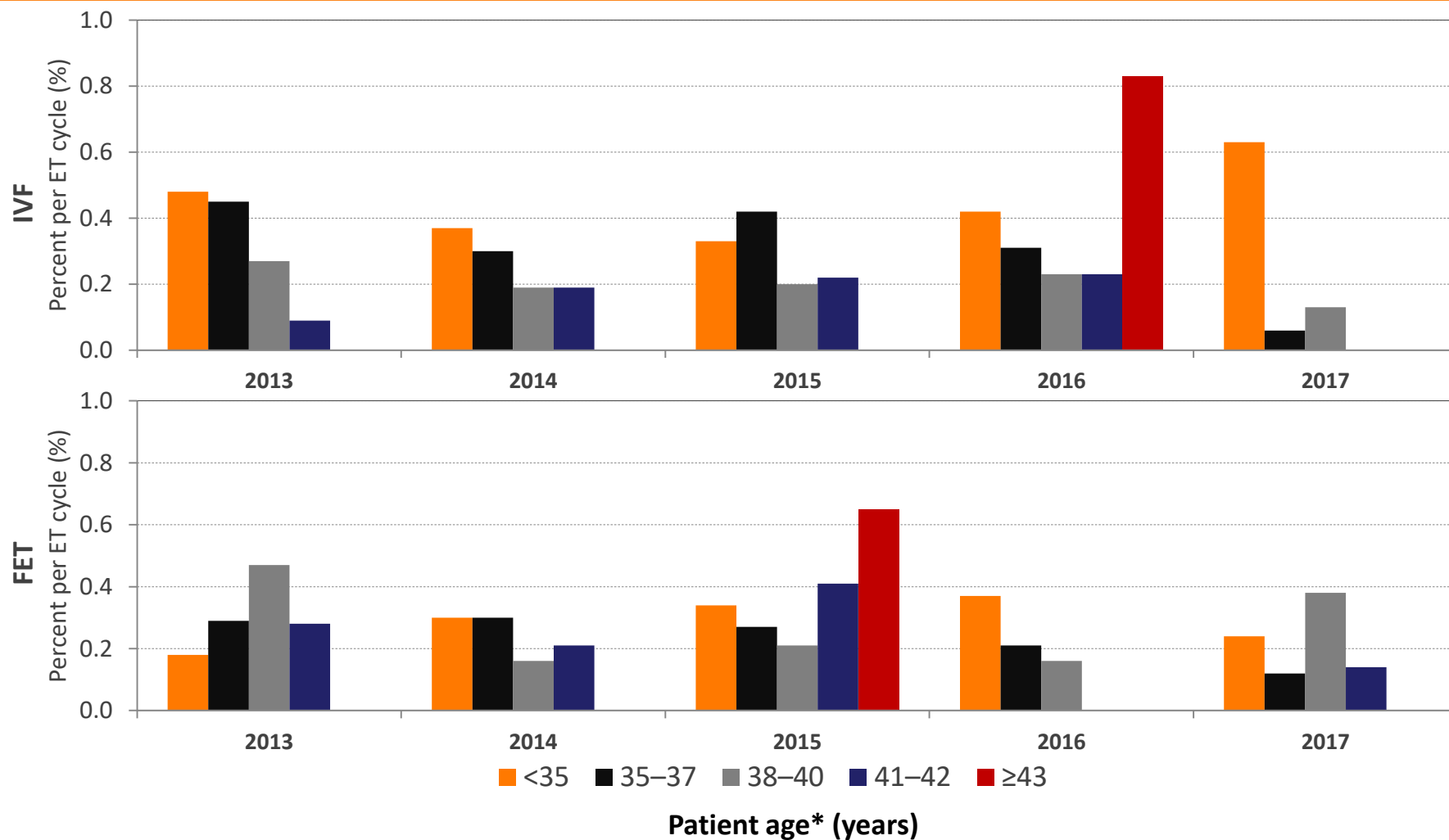


* Patient age at cycle start for IVF cycles and patient age at time of oocyte retrieval for FET cycles

† Miscarriage: birth outcome where all fetuses were a 'pregnancy loss' at <20 weeks' gestation

Proportion of Stillbirths

IVF and FET – own oocytes, 2013 – 2017

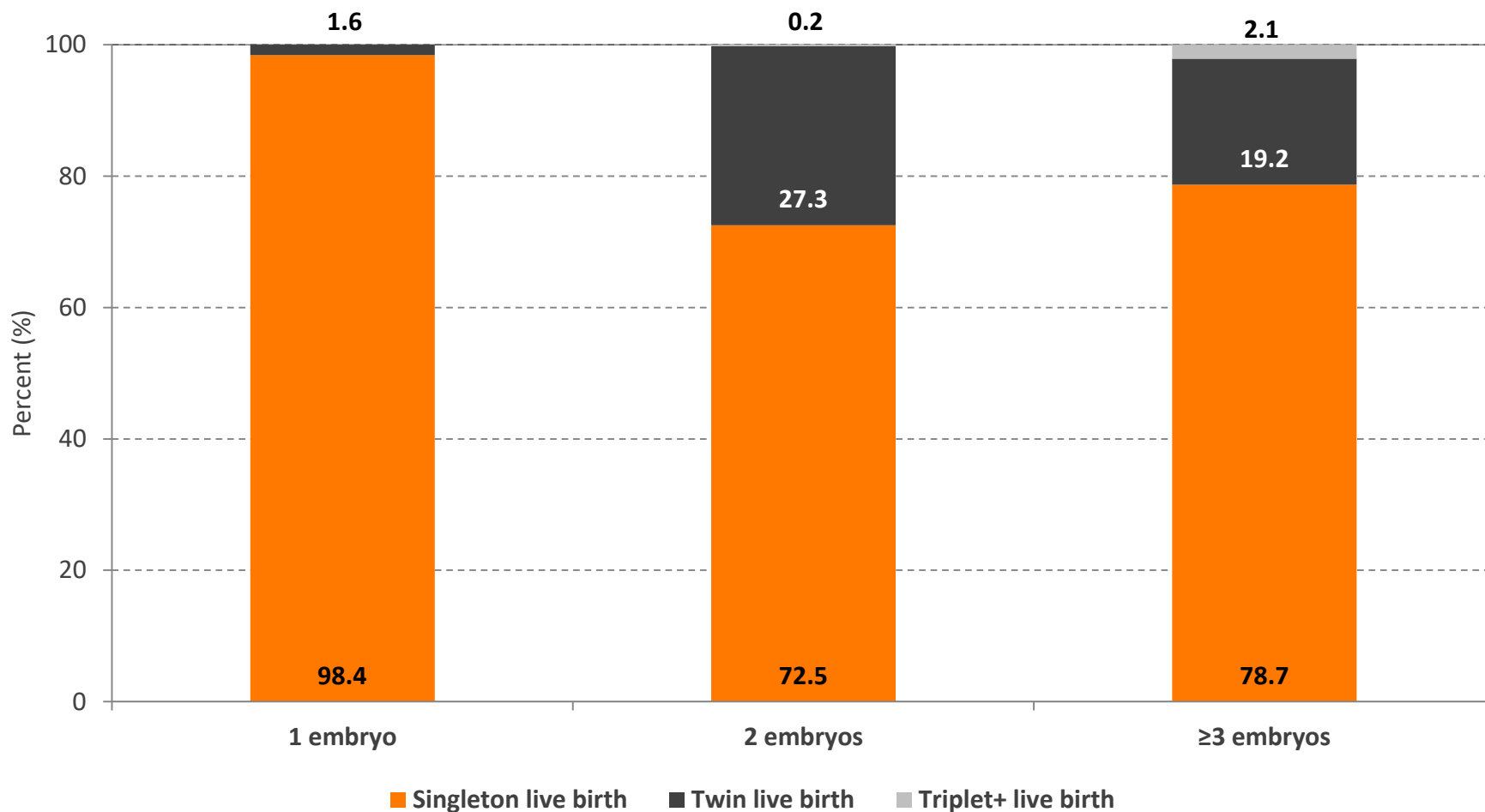


* Patient age at cycle start for IVF cycles and patient age at time of oocyte retrieval for FET cycles

† Stillbirths: birth outcome where no fetus(es) was born alive and at least one stillbirth at ≥ 20 weeks' gestation

Proportion of singleton and multiple live births

All ART treatment cycles (fresh and frozen), 2017



Live births

5,328

1,528

47

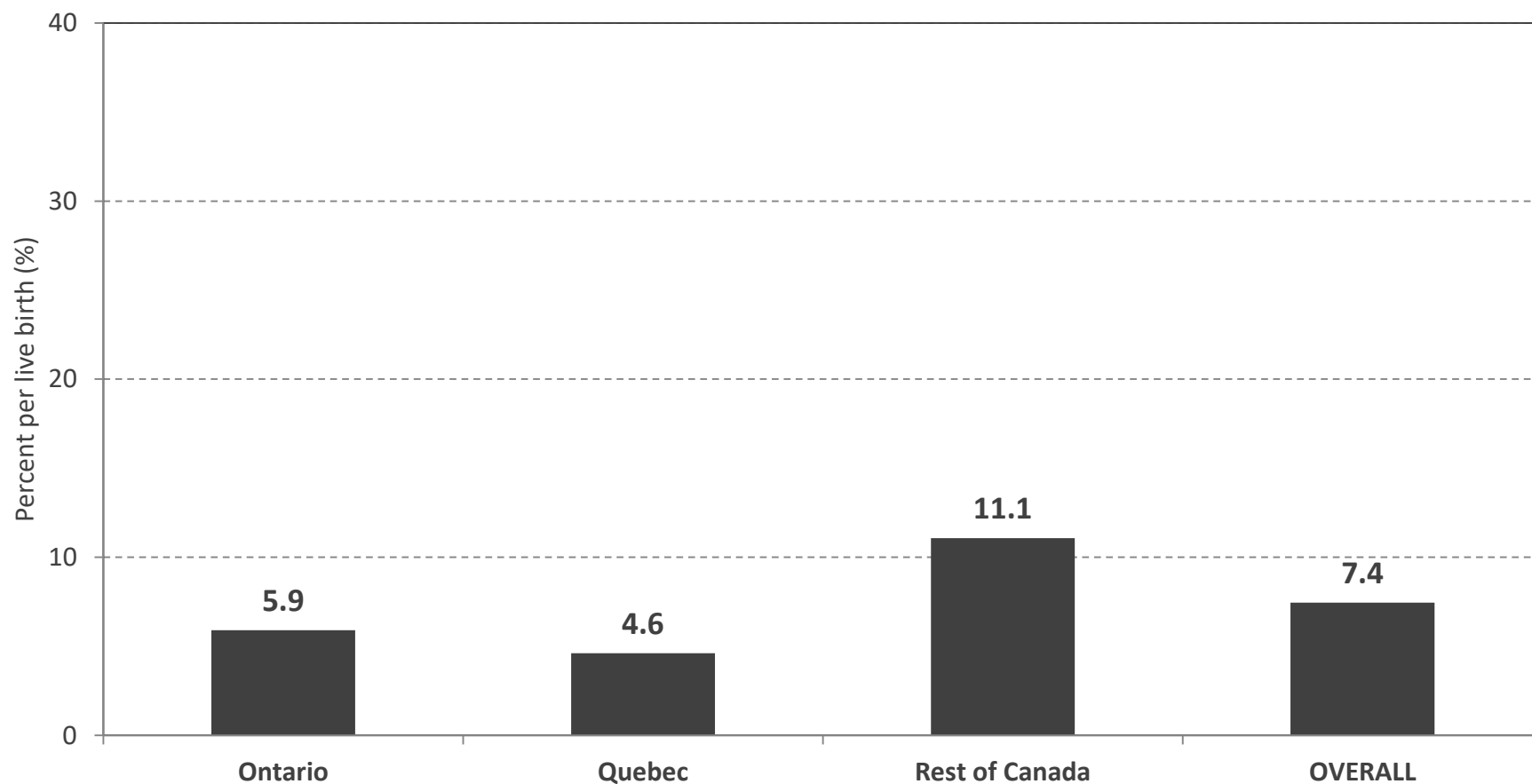
Singleton live birth: one live birth

Twin live birth: two births and at least one live birth

Triplet+ live birth: three or more births and at least one live birth

Percentage of multiple live births by province

All ART treatment cycles (fresh and frozen), 2017



Multiple
births

217

43

254

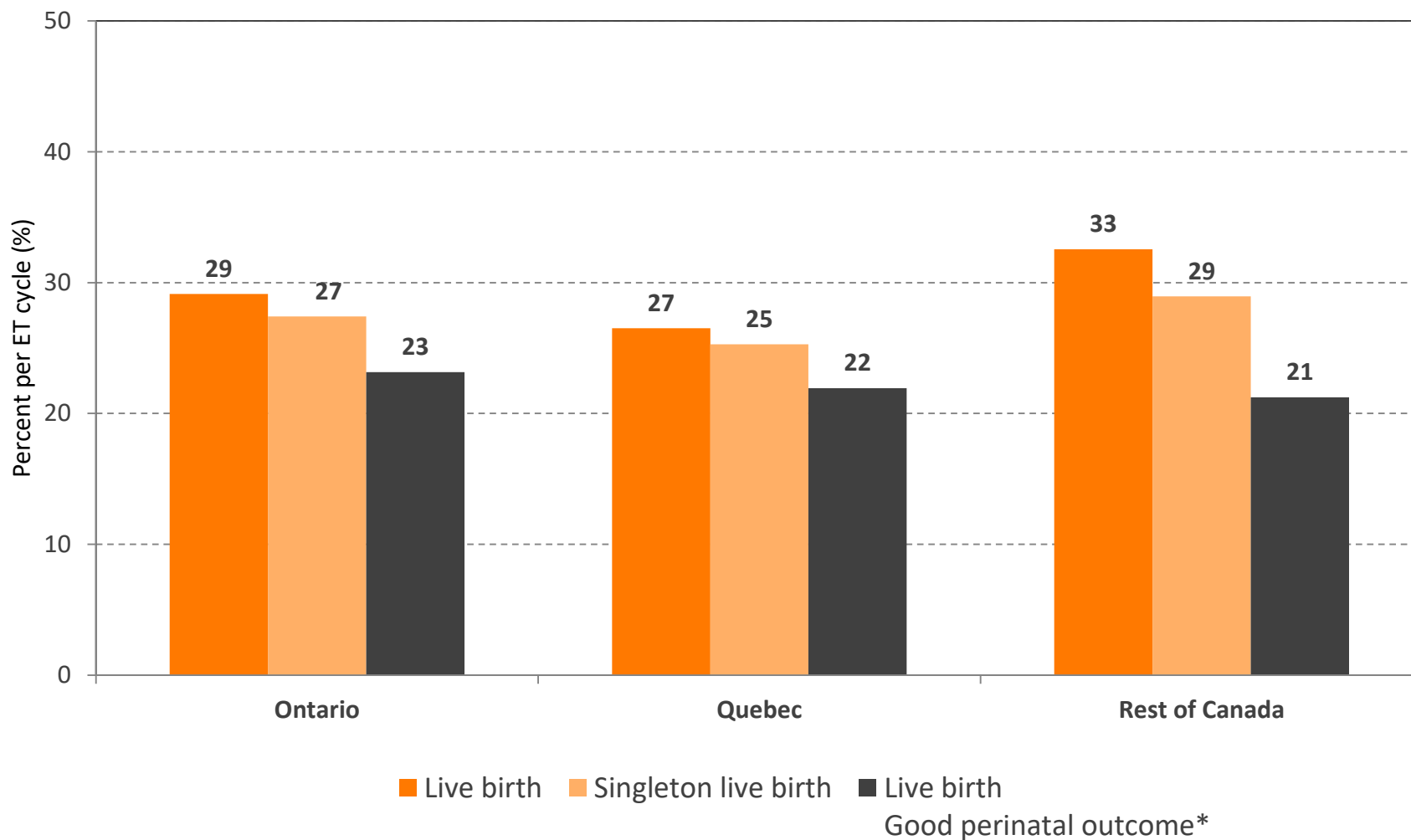
514

Ongoing clinical pregnancy: documentation of at least one fetal heart beat on ultrasound

Multiple birth: At least one live birth from a multiple pregnancy

Birth outcomes by province

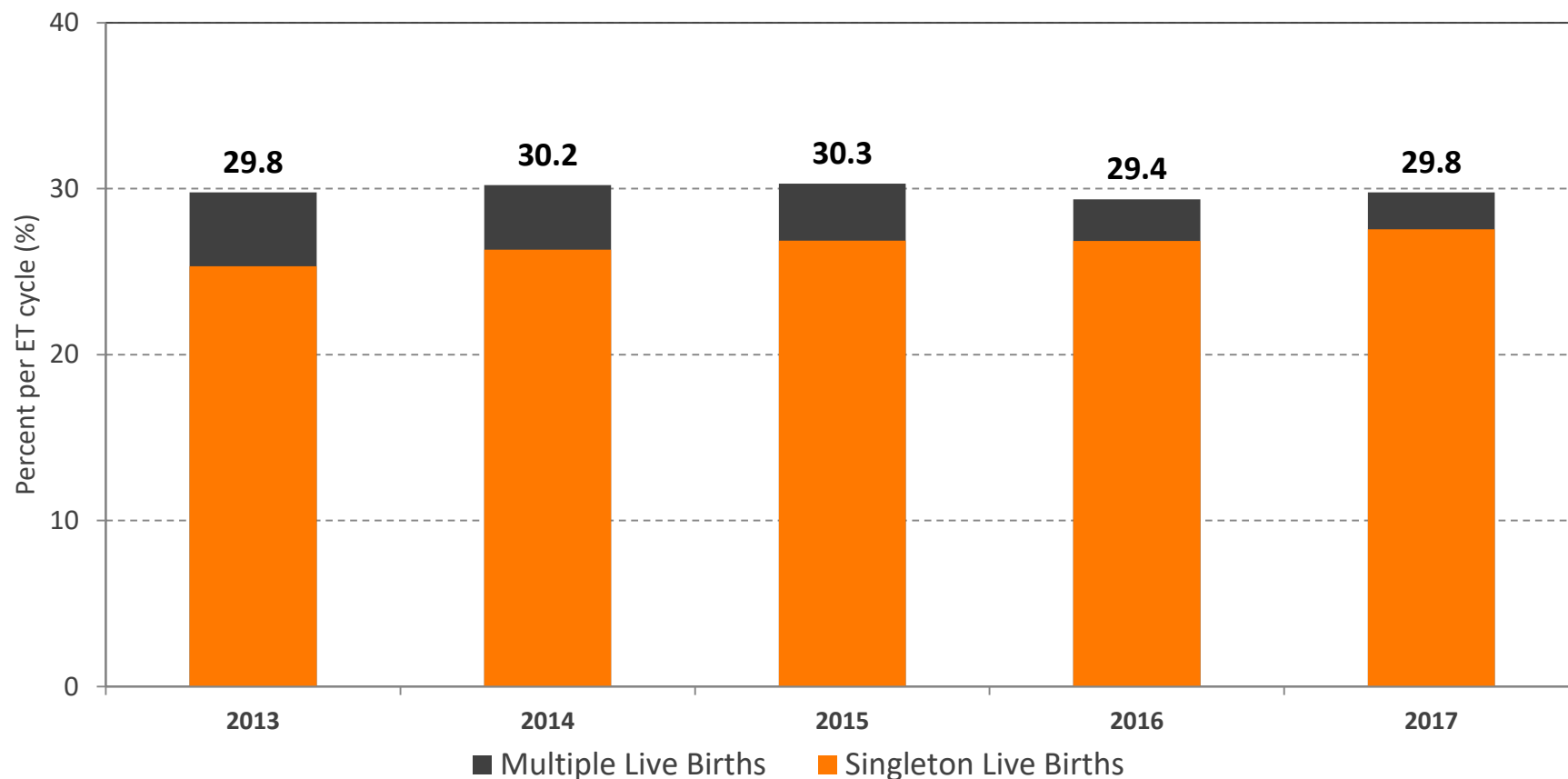
All ART treatment cycles (fresh and frozen), 2017



* Good perinatal outcome: singleton live birth at ≥ 37 weeks' gestation and a birth weight $\geq 2,500$ grams
Cycle starts, and embryo transfers with an unknown birth outcome were removed from the denominator (n=501)

Proportion of singleton and multiple live births

All ART treatment cycles, 2013 – 2017

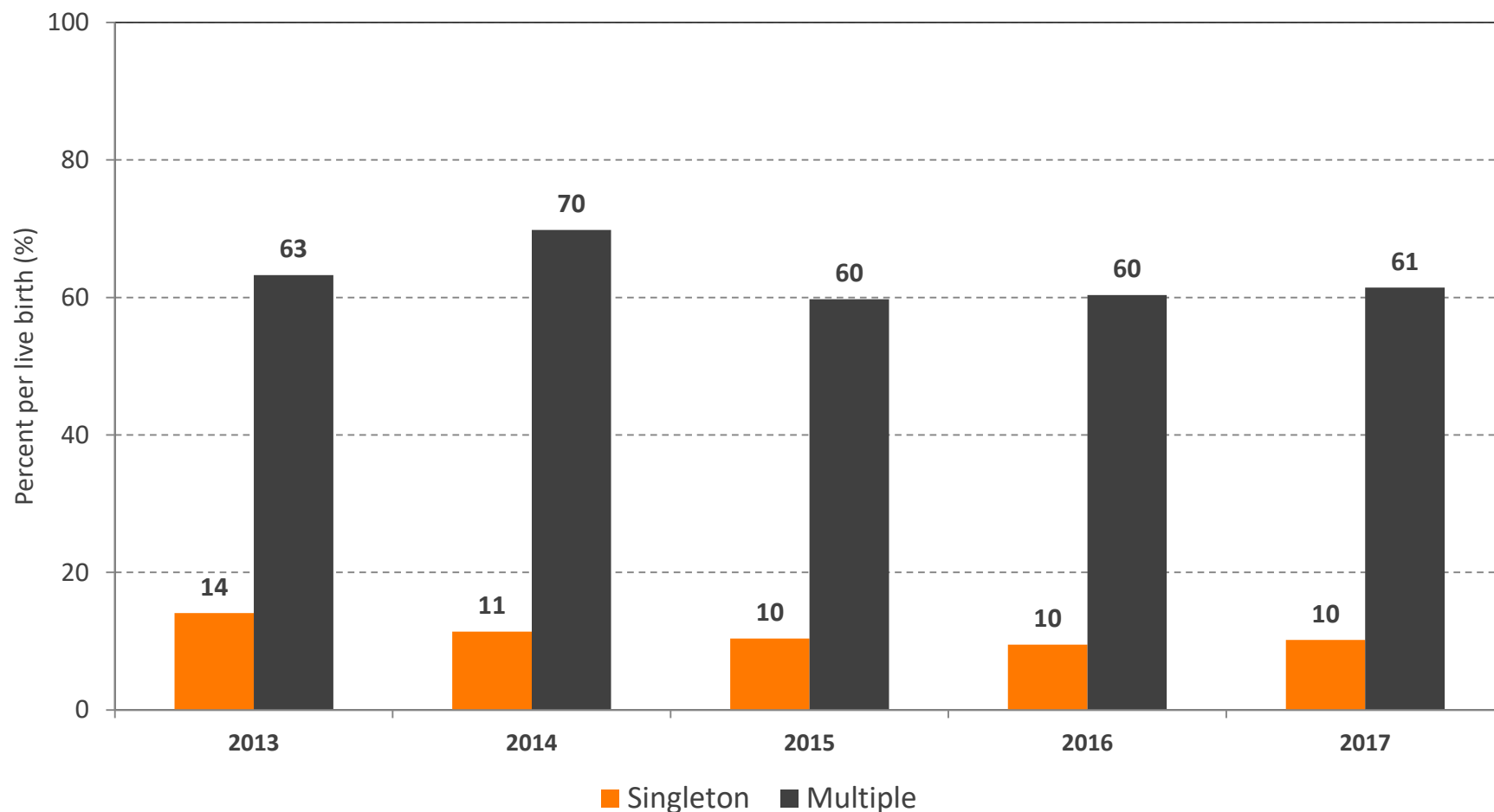


Live Births	5,800	6,215	6,379	6,514	6,903
Singletons	4,932	5,413	5,658	5,957	6,389
Multiples	868	802	721	557	514

† Cycle starts, oocyte retrievals/thaws and embryo transfers with an unknown birth outcome were removed from the denominator (n=501)

Proportion of preterm births by plurality

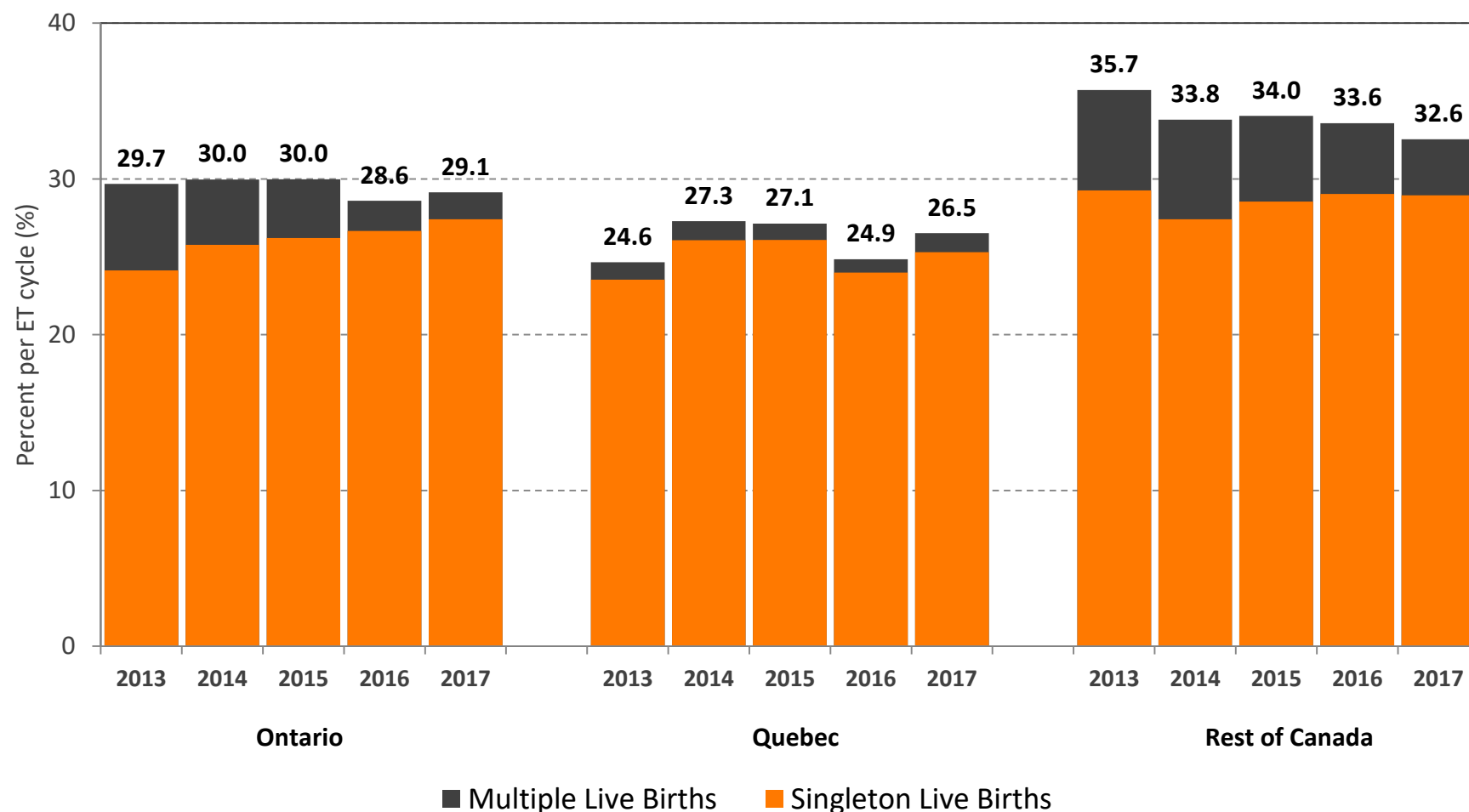
All ART treatment cycles (fresh and frozen), 2013-2017



Preterm birth <37 weeks' gestation.

Proportion of singleton and multiple live births by province

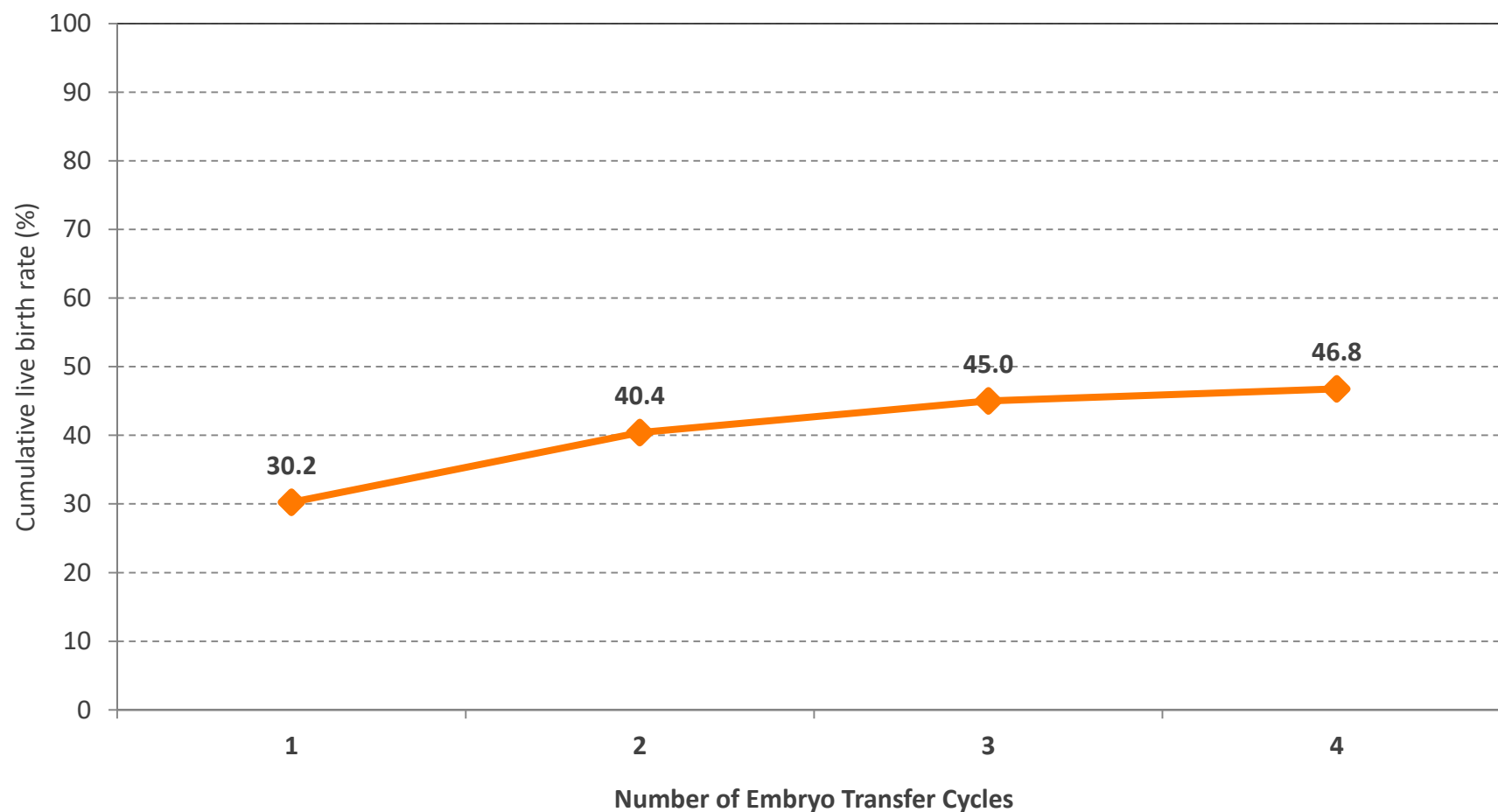
All ART treatment cycles, 2013 – 2017



CUMULATIVE LIVE BIRTH RATE

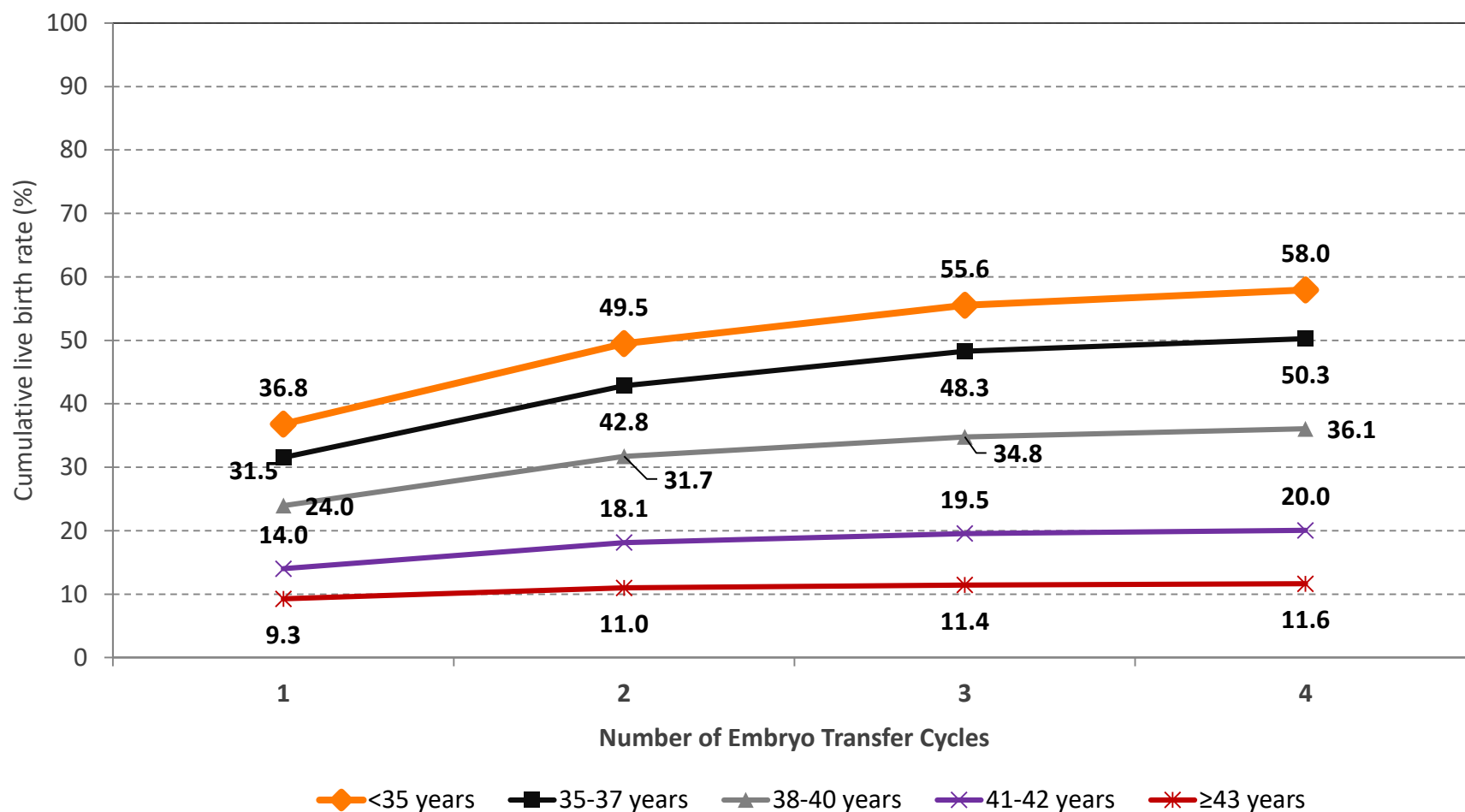
Cumulative live birth rate, per patient

IVF and FET – own oocytes, 2013 – 2017



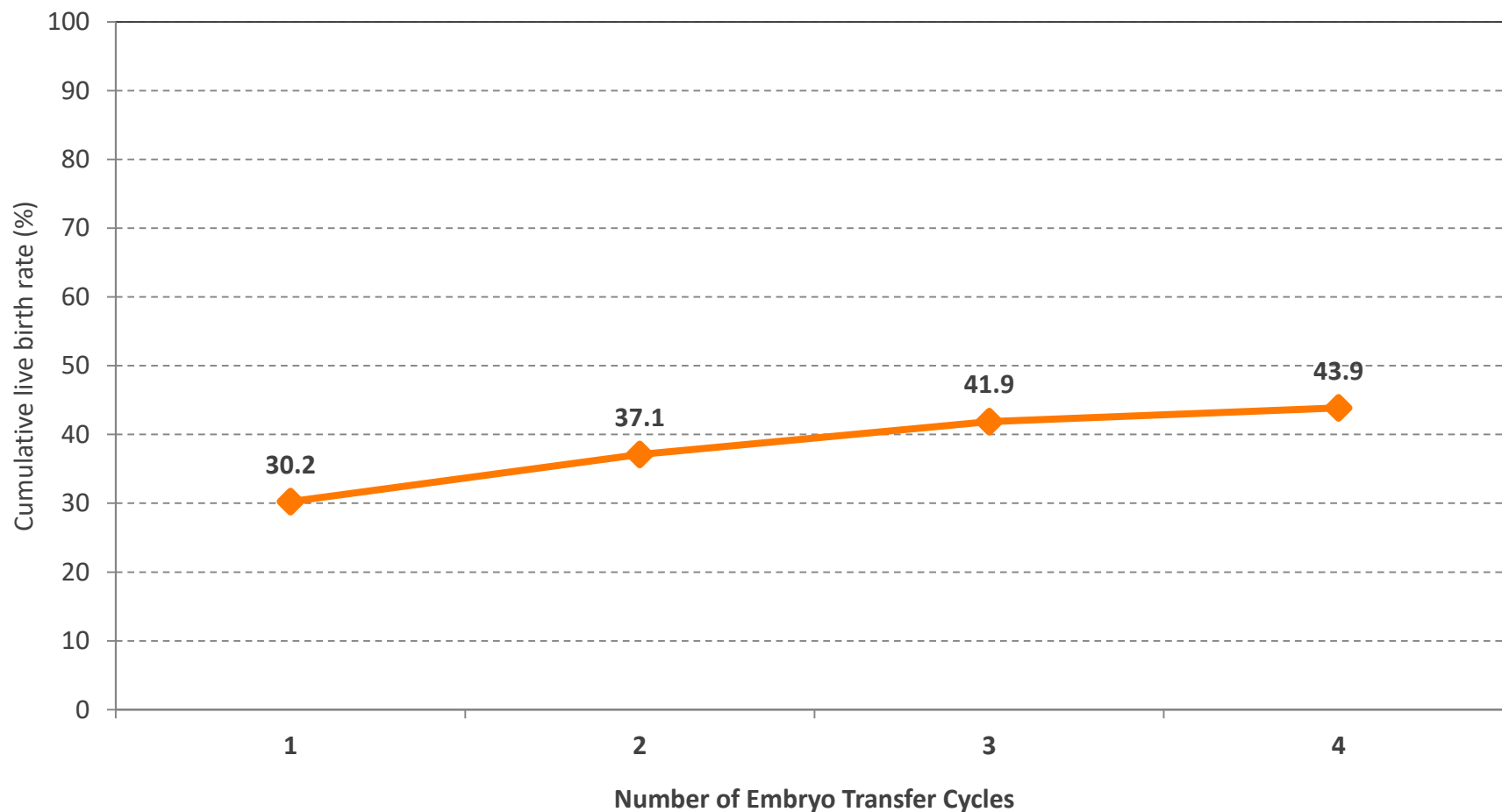
Cumulative live birth rate, per patient, by patient age

IVF and FET – own oocytes, 2013 – 2017



Cumulative live birth rate, per patient, 1 year follow-up

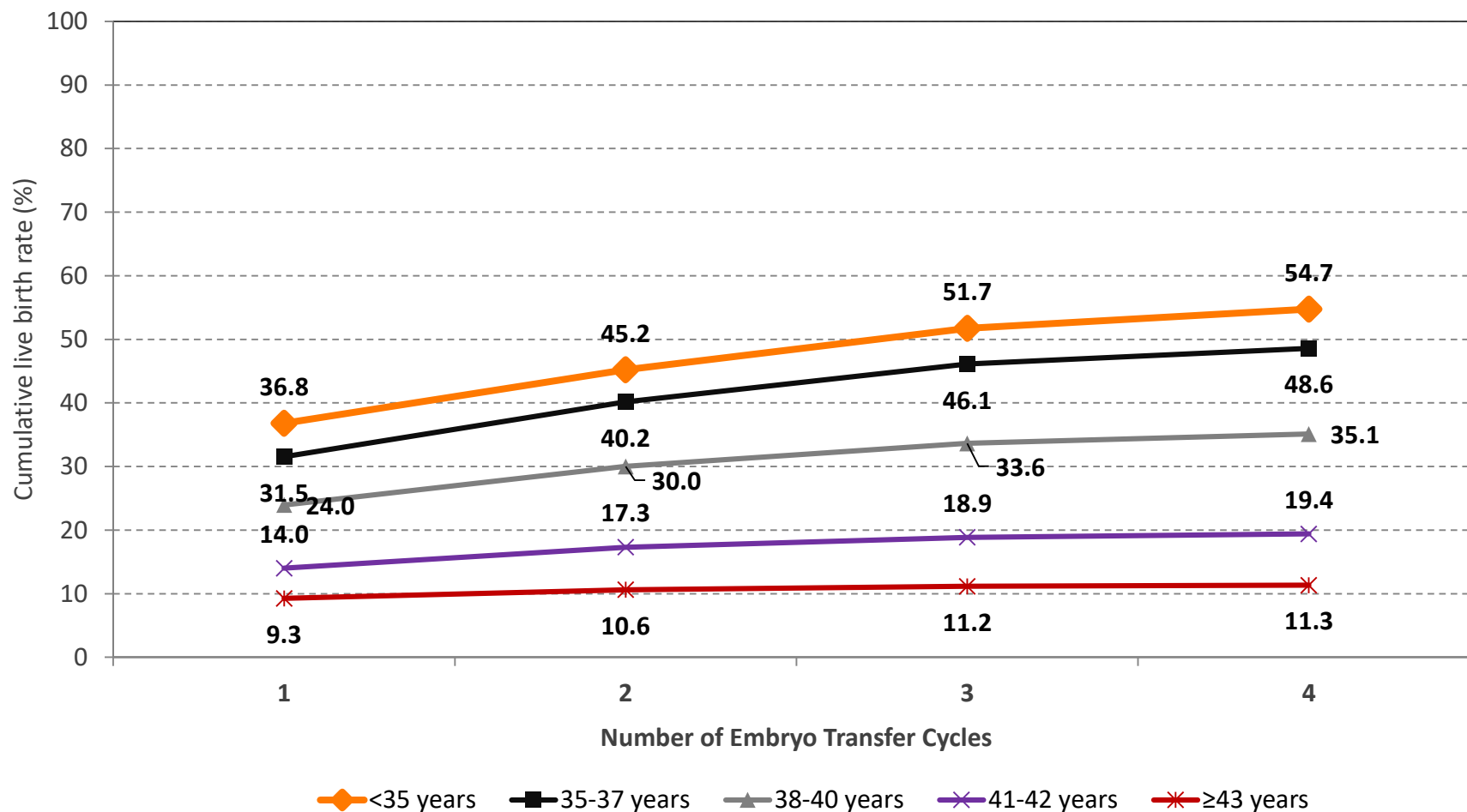
IVF and FET – own oocytes, 2013 – 2017



** Own oocytes exclusively*

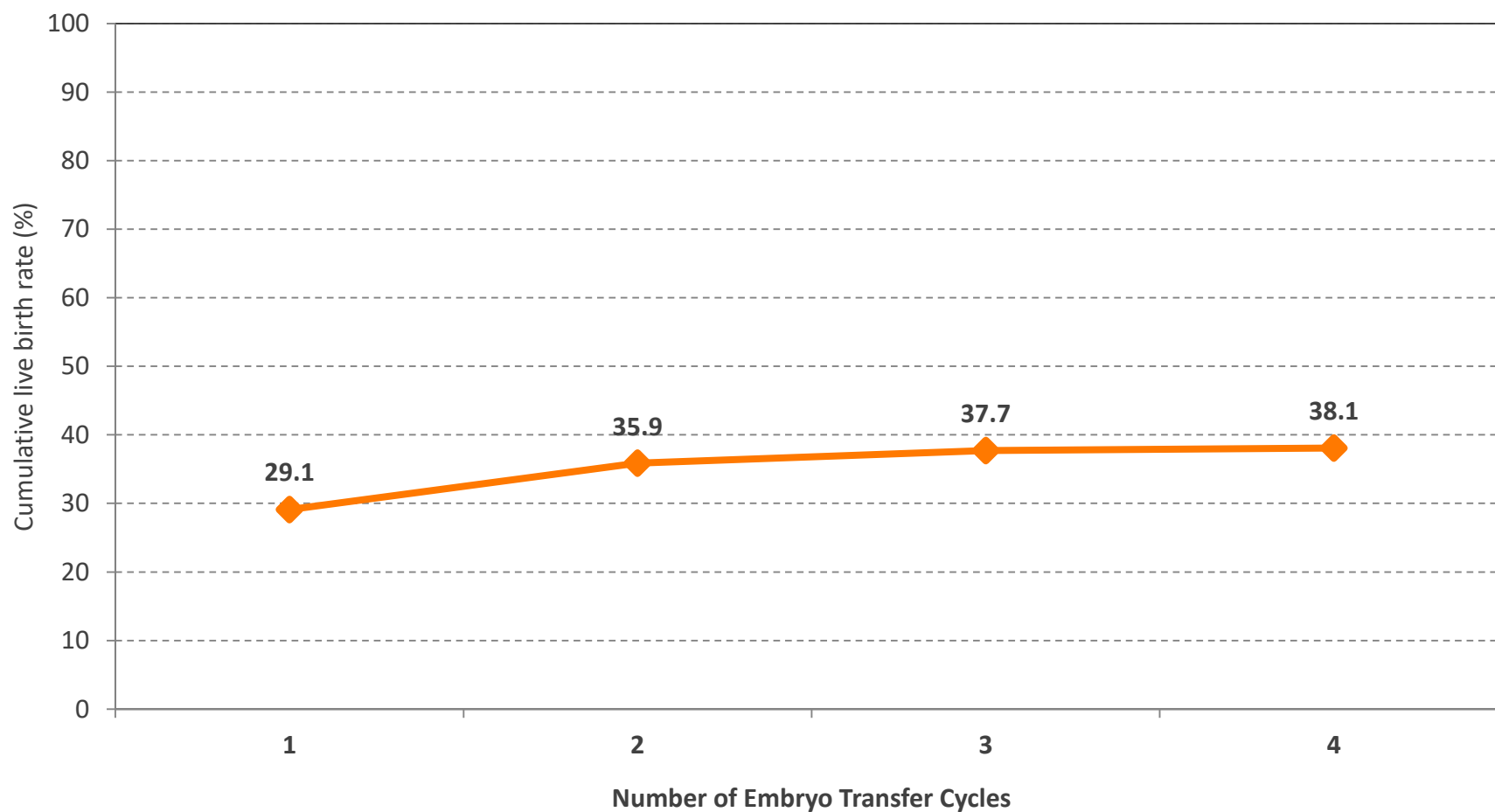
Cumulative live birth rate, per patient, 1 year follow-up by patient age

IVF and FET – own oocytes, 2013 – 2017



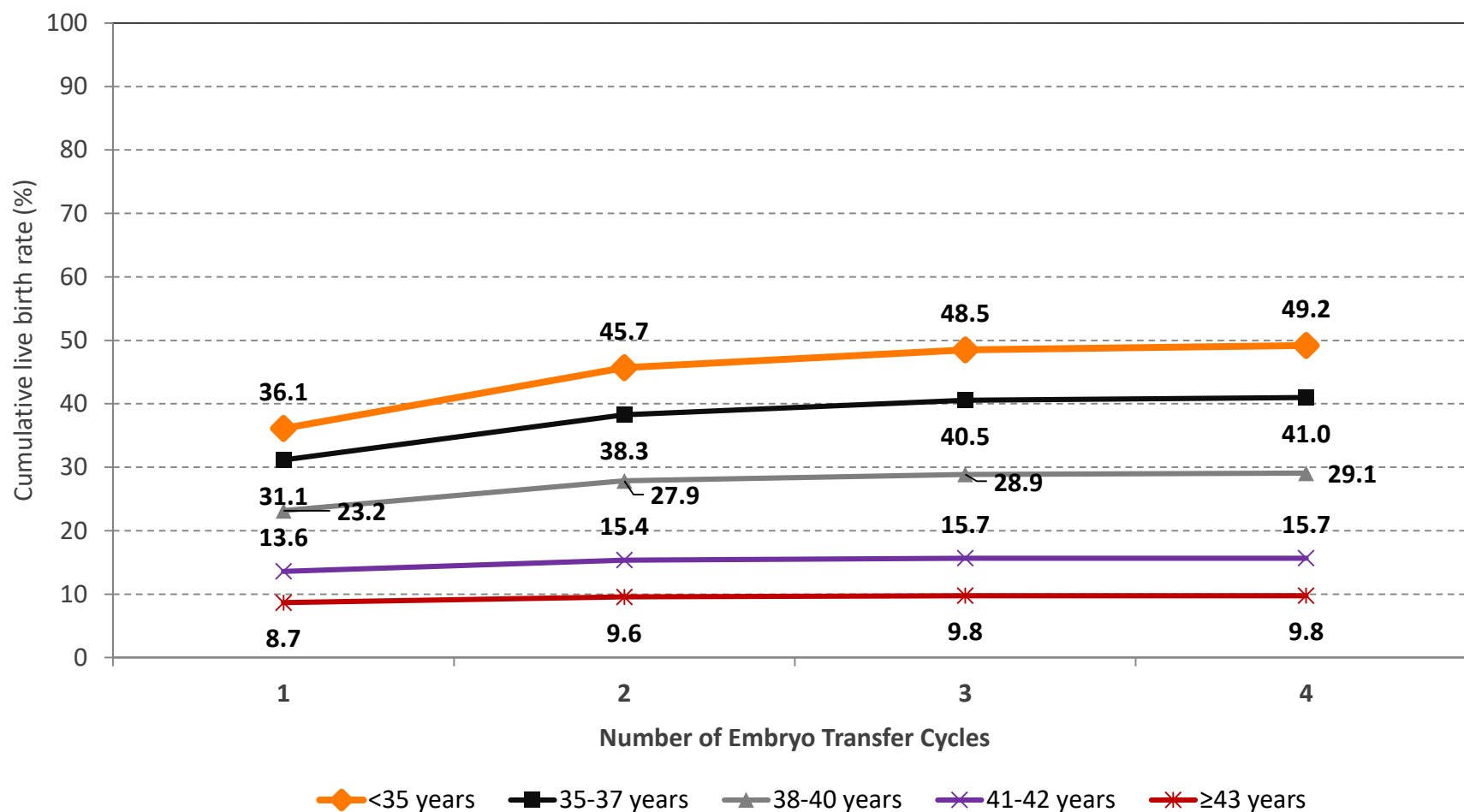
Cumulative live birth rate, per batch

IVF and FET – own oocytes, 2013 – 2017



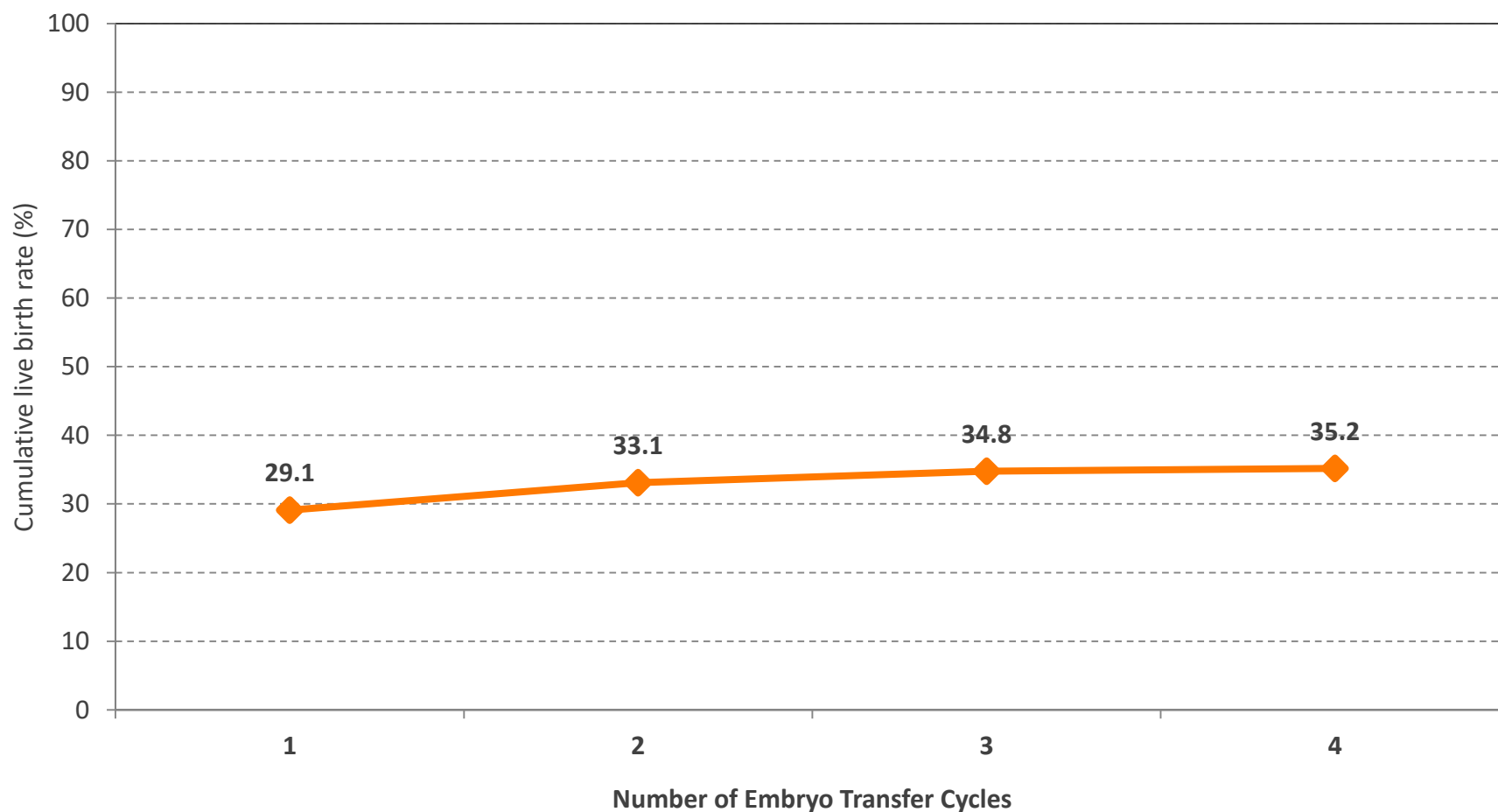
Cumulative live birth rate, per batch, by patient age

IVF and FET – own oocytes, 2013 – 2017



Cumulative live birth rate, per batch, 1 year follow-up

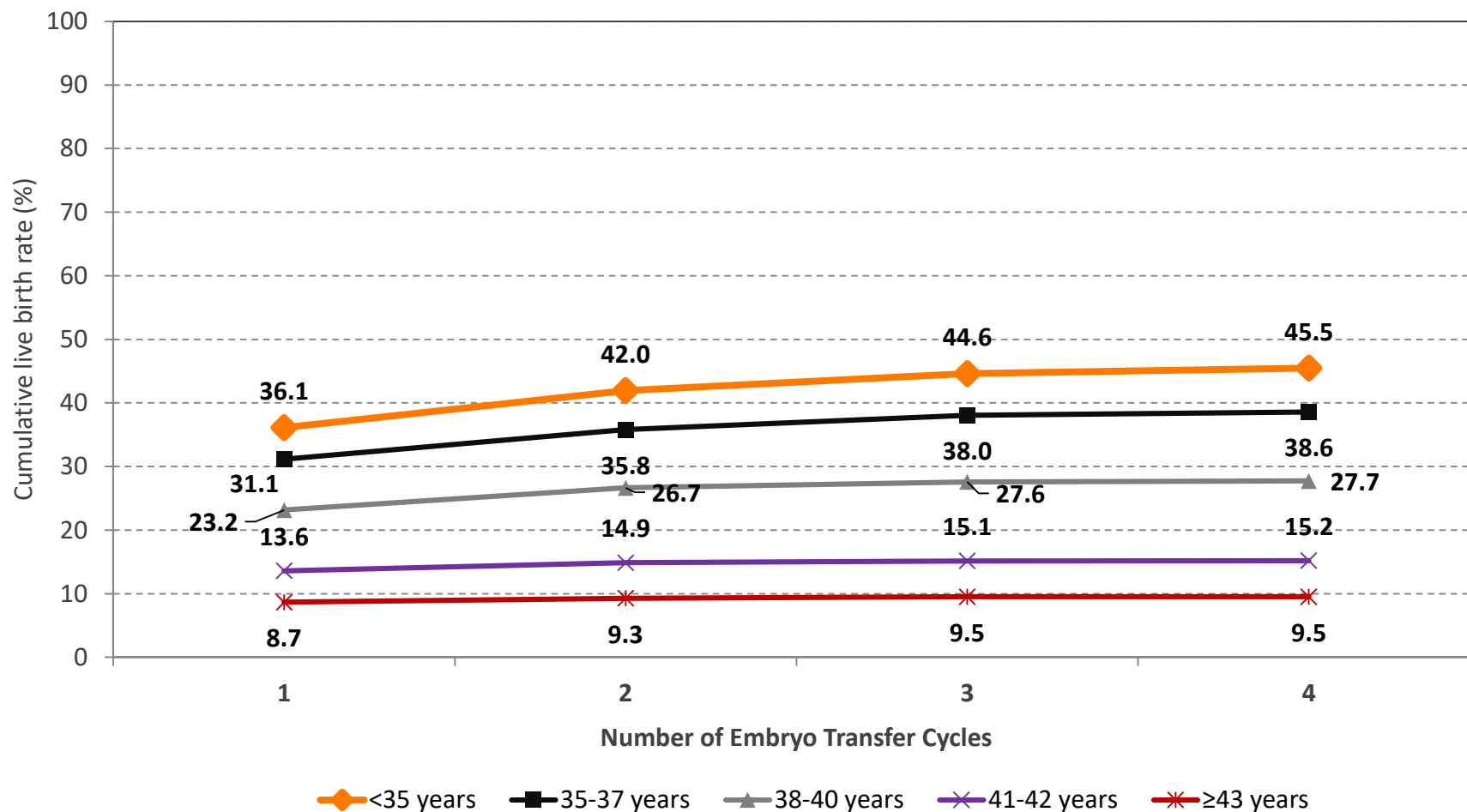
IVF and FET – own oocytes, 2013 – 2017



* Own oocytes exclusively

Cumulative live birth rate, per batch, 1 year follow-up by patient age

IVF and FET – own oocytes, 2013 – 2017



ONTARIO FERTILITY PROGRAM

Ontario Fertility Program

2016

- 4,828 unique patients:
 - 4,768 IVF cycle starts
 - 60 fertility preservation cycles
- 70 gestational carrier cycles

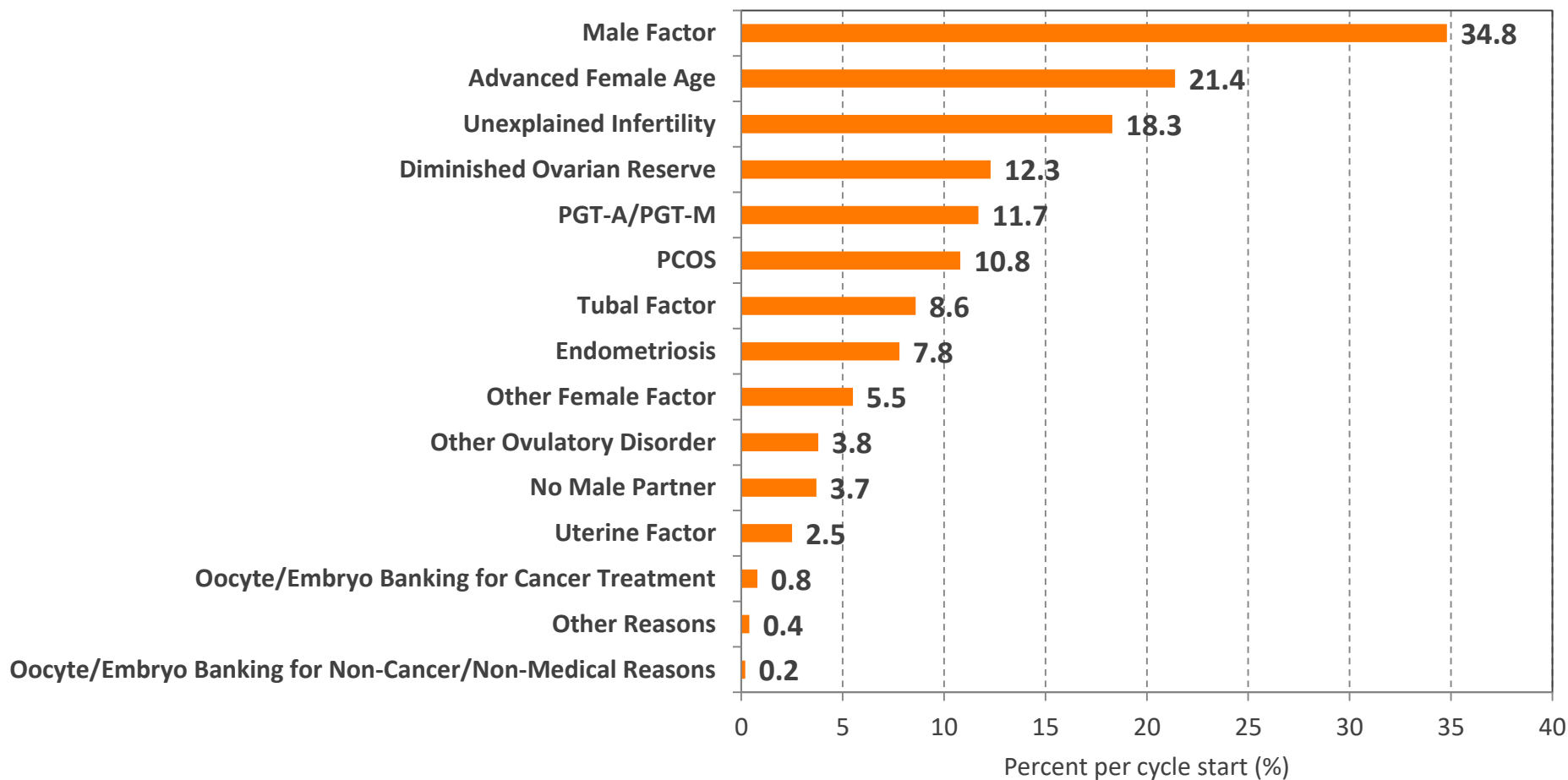
Ontario Fertility Program

2016

- **Treatment cycles :**
 - 5,673 IVF cycle starts
 - 0.86% cancellation rate
 - 5,524 embryo transfer cycles
 - 1,988 clinical pregnancies
 - 36.0% clinical pregnancy rate per ET
 - 1,811 ongoing clinical pregnancy
 - 32.8% ongoing clinical pregnancy rate per ET
 - 95 multiple pregnancies
 - 5.25% multiple pregnancy rate per ongoing clinical pregnancy

Reasons for treatment

All OFP ART treatment cycles (fresh and frozen), 2016



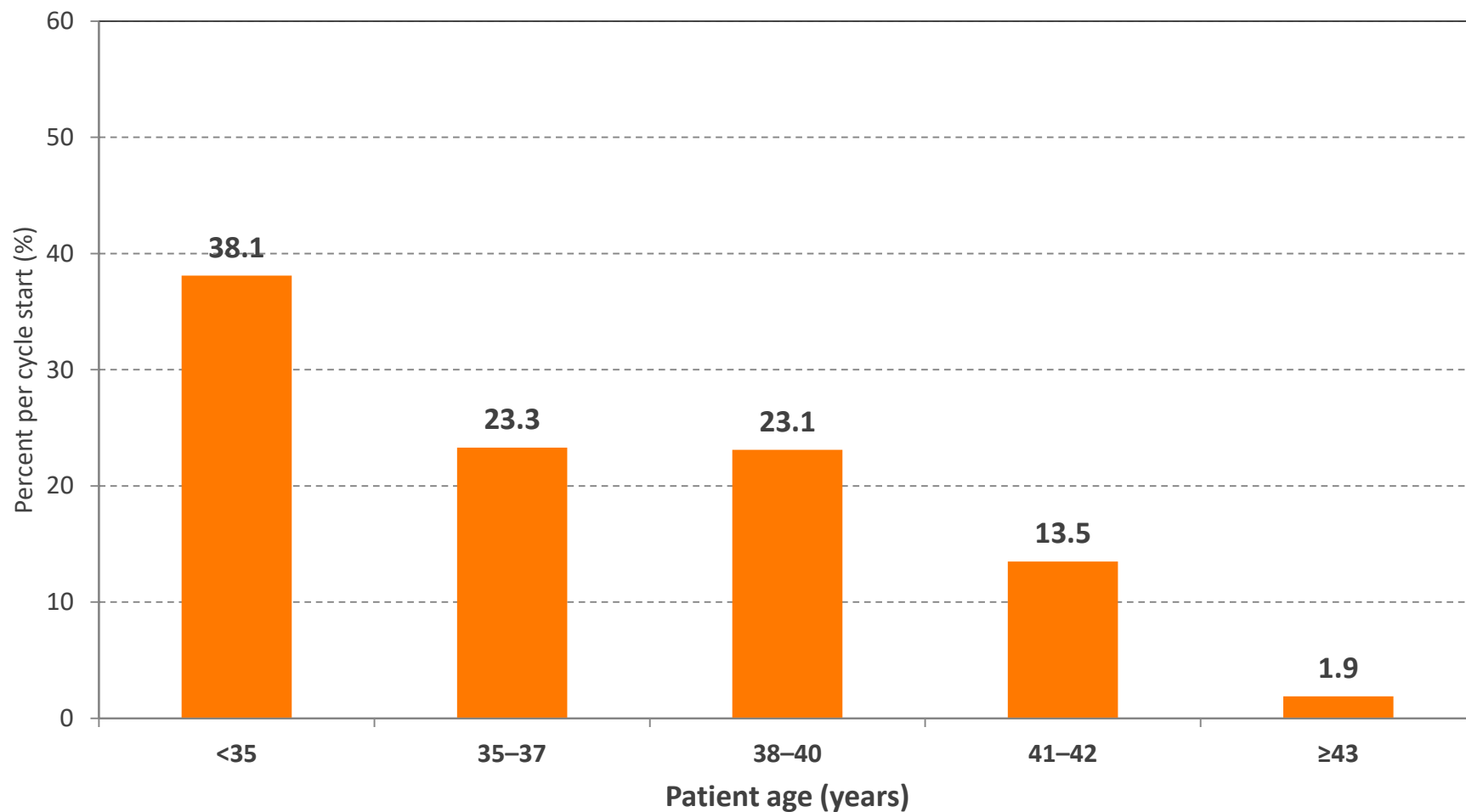
Excludes fertility preservation cycles

** Categories are not mutually exclusive*

† Other reasons include: gonadotoxic therapy, no female partner and peritoneal factor or severe adhesions

Patient age

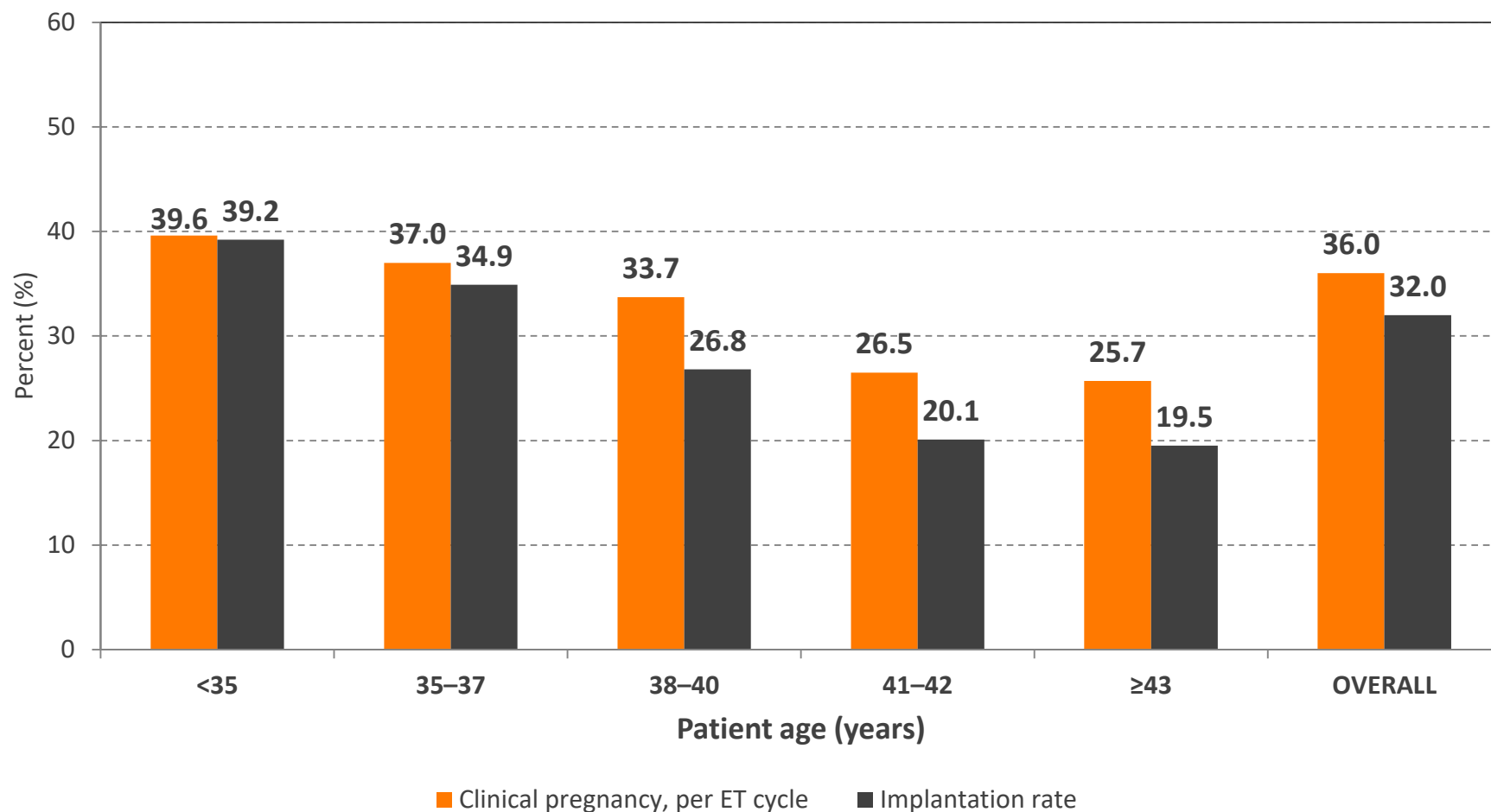
All OFP ART treatment cycles (fresh and frozen), 2016



Excludes fertility preservation cycles

Clinical pregnancy and implantation rate

All OFP ART treatment cycles (fresh and frozen), 2016



* Clinical pregnancy: clinical intrauterine, heterotopic, or ectopic pregnancy

† Implantation rate: number of gestational sacs observed on ultrasound, divided by the total number of embryos transferred

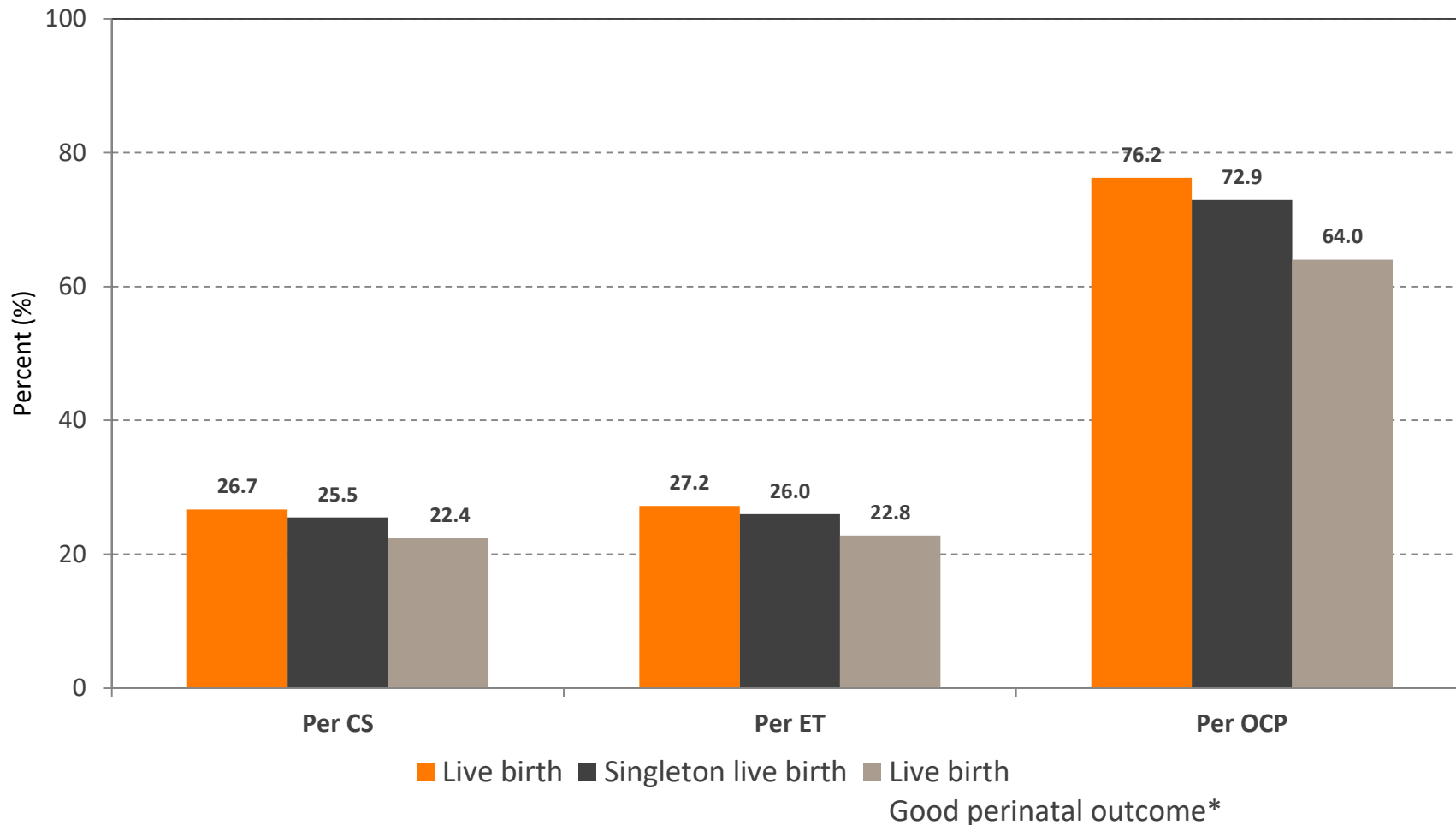
Ontario Fertility Program

2016

- Birth outcomes:
 - 1,489 live births
 - 1,423 singleton live births
 - 1,249 live births with a good perinatal outcome

Birth outcome rates

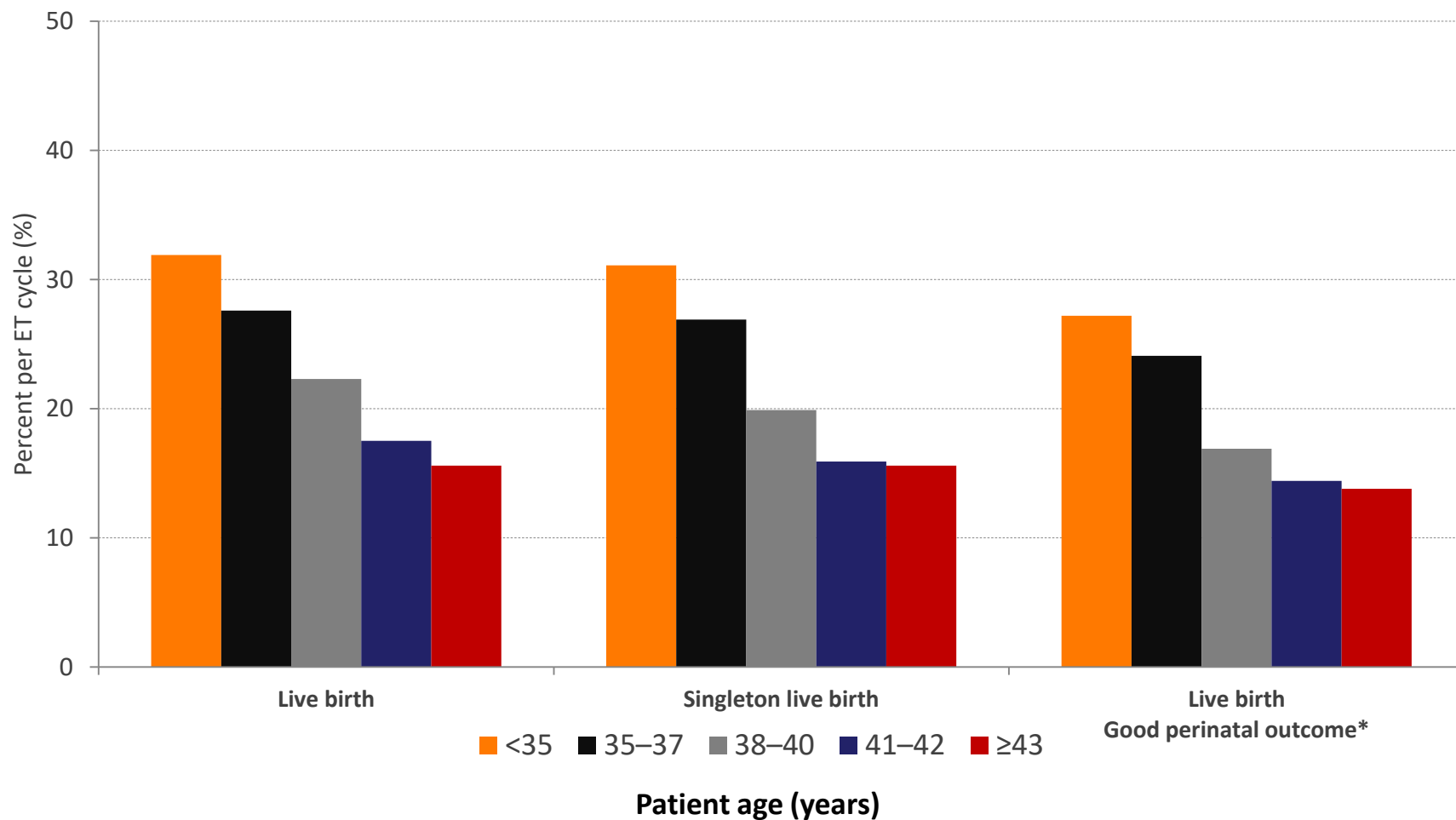
All OFP ART treatment cycles (fresh and frozen), 2016



* Good perinatal outcome: singleton live birth at ≥ 37 weeks' gestation and a birth weight $\geq 2,500$ grams

Birth outcomes by patient age

All OFP ART treatment cycles (fresh and frozen), 2016



* Good perinatal outcome: singleton live birth at ≥37 weeks' gestation and a birth weight ≥2,500 grams

GESTATIONAL AGE AT TIME OF DELIVERY

Ontario births: IVF conceptions compared to spontaneous conceptions

Preterm birth

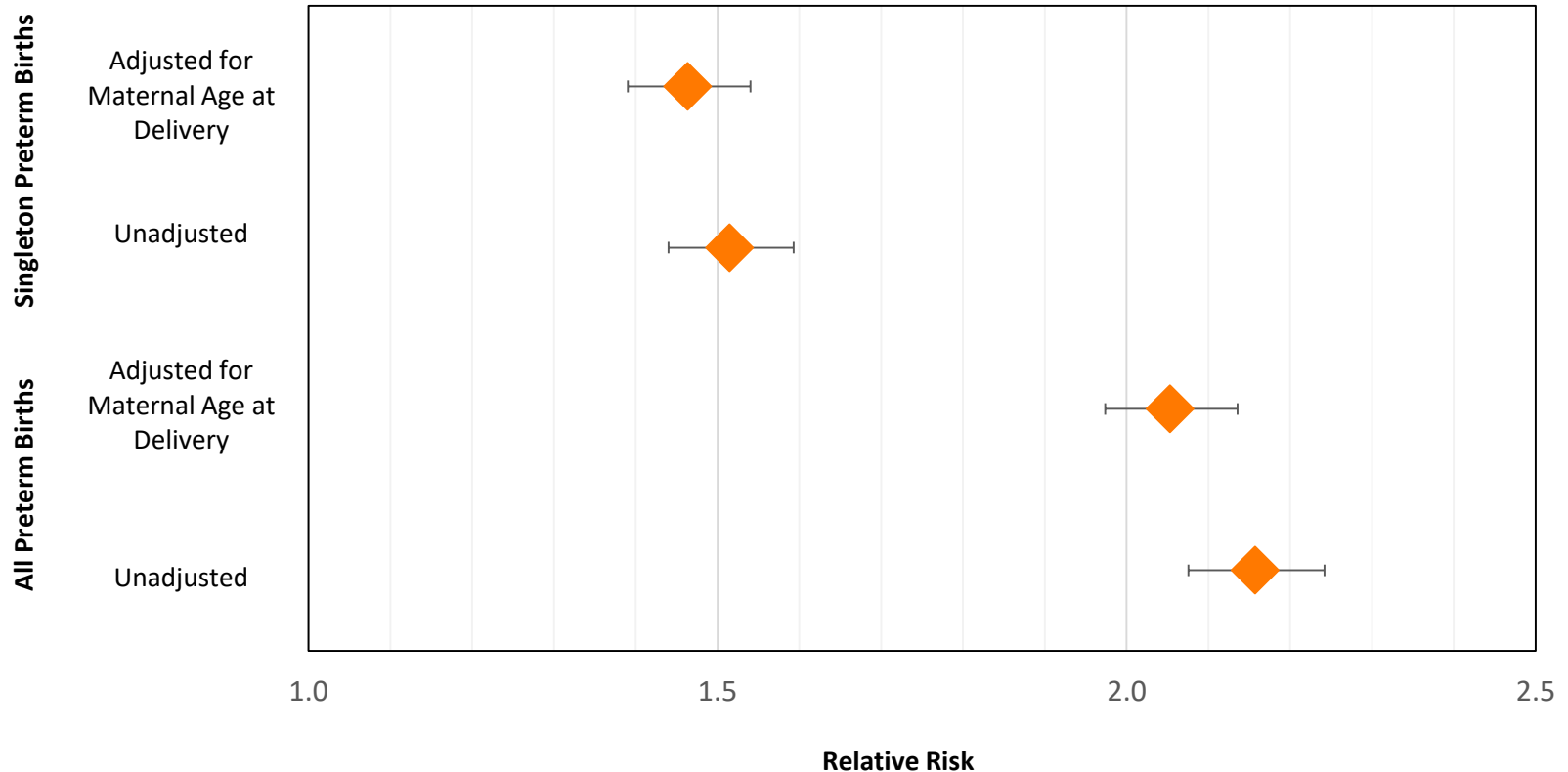
ART vs. Non-ART Ontario – 2013 – 2017

- **Preterm birth:**
 - <37 weeks' gestation
 - RR = 2.16 95% CI: 2.08–2.24
 - adjusted RR = 2.05 95% CI: 1.97–2.14
- **Singleton preterm births:**
 - <37 weeks' gestation
 - RR = 1.51 95% CI: 1.44–1.59
 - adjusted RR = 1.46 95% CI: 1.39–1.54

** Adjusted for maternal age at delivery.*

Preterm birth in Ontario

ART vs. Non-ART Ontario – 2013 – 2017



*Preterm birth is defined as live birth or stillbirth at ≤ 37 weeks gestation.

*Error bars represent 95% Confidence Intervals

Gestational age at time of delivery

ART vs. Non-ART Ontario – 2013 – 2017



Gestational age at delivery	Total births	ART		Non-ART		RR (95% CI)	Adj. RR (95%CI)
		n	%	n	%		
<32 weeks	11,932	488	3.46	11,444	1.46	2.38 (2.17, 2.60)	2.20 (2.01, 2.41)
32 weeks	2,529	106	0.75	2,423	0.31	2.44 (2.01, 2.96)	2.33 (1.91, 2.84)
33 weeks	3,833	196	1.39	3,637	0.46	3.00 (2.60, 3.46)	2.83 (2.45, 3.28)
34 weeks	6,847	280	1.99	6,567	0.84	2.38 (2.11, 2.67)	2.26 (2.00, 2.55)
35 weeks	11,669	417	2.96	11,252	1.43	2.07 (1.86, 2.27)	2.01 (1.82, 2.21)
36 weeks	23,784	771	5.47	23,013	2.93	1.87 (1.74, 2.00)	1.79 (1.67, 1.92)
≥37 weeks	738,422	11,827	83.97	726,595	92.56	0.91 (0.90, 0.91)	0.91 (0.90, 0.92)

* Adjusted for maternal age at delivery.

Gestational age at time of delivery for singleton pregnancies



ART vs. Non-ART Ontario – 2013 – 2017

Gestational age at delivery	Total births	ART		Non-ART		RR (95% CI)	Adj. RR (95%CI)
		n	%	n	%		
<32 weeks	10,563	335	2.66	10,228	1.32	2.00 (1.80, 2.23)	1.85 (1.66, 2.07)
32 weeks	2,079	60	0.48	2,019	0.26	1.82 (1.41, 2.35)	1.75 (1.35, 2.27)
33 weeks	3,148	105	0.83	3,043	0.39	2.11 (1.74, 2.57)	1.99 (1.64, 2.43)
34 weeks	5,798	142	1.13	5,656	0.73	1.54 (1.30, 1.81)	1.48 (1.25, 1.75)
35 weeks	10,142	253	2.01	9,889	1.28	1.57 (1.38, 1.77)	1.54 (1.36, 1.75)
36 weeks	21,069	502	3.98	20,567	2.66	1.49 (1.37, 1.63)	1.46 (1.34, 1.59)
≥37 weeks	732,405	11,218	88.93	721,187	93.34	0.95 (0.95, 0.96)	0.95 (0.95, 0.96)

* Adjusted for maternal age at delivery.

THANK YOU!

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