



Canadian Fertility and Andrology Society
Société canadienne de fertilité et d'andrologie

2021 Revised CFAS Position Statement: Reporting of IVF Outcomes

In vitro fertilization (IVF) is an effective treatment for many causes of infertility. For over two decades, Canadian fertility clinics have voluntarily reported IVF outcomes to the Canadian Assisted Reproductive Technology Registry (CARTR). CARTR has enabled continuous improvement in IVF and in 2012, CARTR joined forces with the Better Outcomes Registry and Network (BORN) Ontario as a means to more readily link IVF treatments with birth outcomes (CARTR Plus).

National reporting of IVF outcomes is of great value to both clinics and patients. CFAS recognizes that there are many valid ways to present IVF results and that interpreting IVF statistics can be confusing when new technologies are introduced. Moreover, if these are not accounted for and cycles are managed differently, they are not readily comparable.

In the interests of better communicating the success of treatments offered, and to assist patients as they make informed decisions about their care, the Canadian Fertility and Andrology Society (CFAS) believes that each Centre that chooses to present outcome data to the public should do so in a form that is clear and easy to understand. To allow patients to make well-informed decisions, it is the CFAS position that all Canadian IVF Centres should adopt the CARTR Plus framework when presenting any IVF outcome data that they wish to share with their patients and the public. Specifically, CFAS recommends that clinics:

- Define a successful outcome (e.g. clinical pregnancy, ongoing pregnancy or live birth,) using the definitions specified in the CARTR Plus report
- Report the exact time period to which the data refers (must be at least one year and not more than 3 years)
- Report the number of cycles involved
- Separate reports on patients using their own eggs from those using donor eggs



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- For non-oocyte donation cycles divide patients into the CARTR Plus age groups and report the number of cycles in each group
- Separate cycles involving PGT-A from those not involving PGT-A
- For cycles not involving PGT-A or fertility preservation, report:
 - The number of egg collections performed
 - The number of egg collections that did not result in at least one embryo transfer
 - The number of primary embryo transfers
 - The total number of embryo transfers (fresh + frozen) performed
 - And report at least two of the following outcomes:
 - Fresh embryo transfers
 - Frozen-thaw embryos transfers
 - Primary embryo transfers
 - The cumulative chance of success per egg retrieval
- For PGT-A cycles report:
 - The number of egg collections performed in which PGT-A was planned
 - The number of egg collections in which PGT-A was planned that did not result in at least one embryo transfer
 - The number of primary embryo transfers
 - The total number of embryo transfers involving PGT-A tested embryos
 - And report at least 2 of the following outcomes:
 - Frozen-thaw embryo transfers
 - Primary embryo transfers
 - The cumulative chance of success per egg retrieval
- If CARTR Plus national averages are used as comparators, then include CARTR data for the equivalent time period referred to by the Centre
- If CARTR Plus data is used as a comparison to clinic specific data then the definitions of outcomes, numerators and denominators must match



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To facilitate standard reporting of clinical outcomes by IVF clinics, the CFAS has developed a reference chart outlining the ways in which clinical outcomes can be reported that are consistent with CARTR Plus. These options are to be reviewed and published annually by the CFAS.

CARTR-PLUS Definitions

Clinical Pregnancy	Gestational sac on ultrasound
Ongoing Pregnancy	≥ one fetal heartbeat on ultrasound
Age Range	< 35, 35-37, 38-40. 41-42, ≥ 43 unless otherwise indicated
Primary embryo transfer	The first embryo transfer, whether fresh or frozen, following an egg retrieval

Accepted Definitions for Reporting Fresh Embryo Transfer Outcomes

Outcome	Definition	Denominator	CARTR Age Range
Clinical Pregnancy Rate per Fresh Embryo Transfer	# Of fresh embryo transfers that resulted in a clinical pregnancy / # of fresh embryo transfers performed	All fresh embryo transfers	√
Ongoing Pregnancy Rate per Fresh Embryo Transfer	# Of fresh embryo transfers that resulted in an on-going pregnancy / # of fresh embryo transfers performed	All fresh embryo transfers	√
Live Birth Rate per Fresh Embryo Transfer	# Of fresh embryo transfers that resulted in a live birth / # of fresh embryo transfers performed	All fresh embryo transfers	√



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Accepted Definitions for Reporting Frozen-Thaw Embryo Transfer

Outcomes

Outcome	Definition	Denominator	CARTR Age Range
Clinical Pregnancy Rate per Frozen-Thaw Embryo Transfer	# Of frozen-thaw transfers that resulted in a clinical pregnancy / # of frozen-thaw embryo transfers performed	All frozen-thaw embryo transfers	√
Ongoing Pregnancy Rate per Frozen-Thaw Embryo Transfer	# Of frozen-thaw embryo transfers that resulted in an on-going pregnancy / # of frozen-thaw embryo transfers performed	All frozen-thaw embryo transfers	√
Live Birth Rate per Frozen-Thaw Embryo Transfer	# Of frozen-thaw embryo transfers that resulted in a live birth / # of frozen-thaw embryo transfers performed	All frozen-thaw embryo transfers	√

Reporting Primary Embryo Transfer Outcomes

Outcome	Definition	Denominator	CARTR Age Range
Clinical Pregnancy Rate per Primary Embryo Transfer	# Primary embryo transfers that resulted in a clinical pregnancy / # of primary embryo transfers performed	All primary embryo transfers	√
Ongoing Pregnancy Rate per Primary Embryo Transfer	# Of primary embryo transfers that resulted in an on-going pregnancy / # primary embryo transfers performed	All primary embryo transfers	√
Live Birth Rate per Primary Embryo Transfer	# Of primary embryo transfers that resulted in a live birth / # of primary embryo transfers performed	All primary embryo transfers	√



Accepted Definition for Reporting Cumulative Outcomes

Outcome	Definition	Denominator	CARTR Age Range
Cumulative Chance of a Clinical Pregnancy per Egg Retrieval	The occurrence of at least one clinical pregnancy from all embryo transfers done within one year of the retrieval that created the embryos/ # of oocyte retrievals that were associated with at least one fresh or frozen-thaw embryo transfer cycle within one year of the oocyte retrieval	All of egg retrievals that were associated with at least one fresh or frozen-thaw embryo transfer cycle within one year of the oocyte retrieval	√
Cumulative Chance of an Ongoing Pregnancy per Egg Retrieval	The occurrence of at least one ongoing pregnancy from all embryo transfers done within one year of the retrieval that created the embryos/ # of oocyte retrievals that were associated with at least one fresh or frozen-thaw embryo transfer cycle within one year of the oocyte retrieval	All of egg retrievals that were associated with at least one fresh or frozen-thaw embryo transfer cycle within one year of the oocyte retrieval	√
Cumulative Chance of a Live Birth per Egg Retrieval	The occurrence of at least one pregnancy that resulted in a live birth from all embryo transfers done within one year of the retrieval that created the embryos/ # of oocyte retrievals that were associated with at least one fresh or frozen-thaw embryo transfer cycle within one year of the oocyte retrieval	All of egg retrievals that were associated with at least one fresh or frozen-thaw embryo transfer cycle within one year of the oocyte retrieval	√

For example,

If 100 Egg Retrievals associated with at least on embryo transfer within a year of the retrieval are associated with the following outcomes:

- 50 fresh primary transfers, 25 of which result in a clinical pregnancy
- 50 frozen-thaw primary transfers, of which 30 result in a clinical pregnancy
- 50 non-primary frozen-thaw transfers among patients who did not already achieve at least one clinical pregnancy, of which 10 resulted in a clinical pregnancy

Then the cumulative # of clinical pregnancies achieved from those 100 egg retrievals would be 25 + 30 + 10, and hence the cumulative chance of clinical pregnancy would be 65% (65/100).

For more information regarding the calculation of cumulative outcomes please see CARTR document on *Cumulative Clinical Pregnancy and Live Birth Rates from Autologous In Vitro Fertilization Treatment Cycles in Canada*



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December 14, 2021

Reporting of IVF Outcomes

Dear IVF Medical Director,

The CFAS has recently updated its Position Statement on the Reporting of IVF Outcomes. If you have not already had the chance to review this document, then we invite you to do so on the CFAS web site at https://cfas.ca/Compliance_Seal.html

The CFAS recognizes that clinics continue to evolve with regard to the manner in which they present IVF statistics to their patients. Some clinics report only national CARTR Plus aggregate data. Others have opted to remove statistics entirely from their website, recognizing that statistical averages may be misleading for individual patients. However, many continue to report their Centre-specific data.

The CFAS would like to encourage clinics that report Centre-specific data to adopt the CARTR Plus framework as outlined in the Position Statement.

To this end, the CFAS would like to invite those clinics that have adopted the CARTR Plus framework to apply for a **CFAS Compliant** affirmation that can be posted on your website with your data.

This logo would come with the following statement:

The Canadian Fertility and Andrology Society (CFAS) certifies that the format in which this Centre presents their IVF data complies with CFAS standards. In doing so, this IVF Centre demonstrates a commitment to clear and easily understood patient communication concerning treatment outcomes. Note that CFAS compliance refers to presentation of data only. The data itself has not been independently audited by the CFAS and remains proprietary to the clinic. Patients should be aware that it is very difficult to compare the results of one clinic with those of another since each has a unique patient population. Many other factors can affect treatment outcomes. Your estimated chance of success with treatment must be individualized to your particular situation and can only be provided once you have had a consultation with the clinic of your choice. The CFAS is a national non-profit multidisciplinary society dedicated to promoting excellence in the field of Assisted Reproduction to the benefit of Canadians and children born of this technology

If you are interested in applying for this affirmation or would like more information, please contact the CFAS office.

Sincerely,

The CFAS Board of Directors



CFAS Compliance Seal

Application Form

Clinic Name			Current Year	2022
Address		City	Prov	Postal Code
Medical Director's First Name				
Medical Director's Last Name			CFAS Member #	
Is this your first application? <input type="checkbox"/> Y <input type="checkbox"/> N	Date of your first application		Renewal Year	

The CFAS Compliance Seal (the "Seal") was created to recognize fertility clinics that opt to display their clinics success rates using a recognized criterion. By using CARTR data as a standard, we aim to omit data manipulation that skews favorable results, and instead transparently transmit clinic success rates to existing or to any potential new patients the clinic will attract. This seal does not imply, and may not be used to imply, that the clinic is approved or recommended by the CFAS, but is meant to demonstrate that the clinic uses CFAS approved criteria to share their clinic success rates.

The Seal is the property of the CFAS. Its unapproved use by any third party including, without limitation, a member, sponsor, or exhibitor, may imply CFAS support or endorsement for particular activities, programs, or organisations, or a specific relationship between CFAS and the third-party user. In addition, the misrepresentation and use of the Seal is misleading to the public. Accordingly, the Seal may only be used in accordance with this policy.

Participating clinics are invited to utilize a CFAS approved Reference Chart that integrates the CARTR Plus framework when completing their CFAS Compliant IVF Outcome Report for submission to the CFAS for the Compliance Seal.

Use of the CFAS Compliance Seal

1.1 Use of the CFAS Compliance Seal by third parties

The Seal may not be used in any format by any third party without express written permission from the CFAS, and may only be used for the time frame approved by the CFAS

1.1.1 Notice of permission granted

Once a clinic has received approval from the CFAS to use the Seal, it will be notified in writing of their approval and the criteria specifying the limitation with respect to their use of the Seal. The CFAS reserves the right to monitor any CFAS compliant clinic and revoke the Seal and the use thereof should the clinic be found demonstrating inaccuracies or inconsistencies with their reporting, or failure to follow the required criterion in any way.

All decisions related to the use of the Seal will be assessed by the Executive Director in accordance with

policies determined by the Board of the CFAS.

1.1.2. Unauthorized use of the CFAS Compliance Seal

Any unauthorized use of the Seal constitutes copyright infringement in violation of Canada’s copyright laws and will result in CFAS demanding that the Seal be removed immediately and revoke the clinic’s use of the Seal. Should the CFAS revoke the clinic’s use of the Seal, the participating clinic must remove the Seal from its website and any other material or communications, and cannot represent that they are Seal compliant, within one (1) week of notice of such it being revoked.

The CFAS will then periodically monitor all related websites and social media accounts, and any further infraction of the use of intellectual property or improper characterization of the relationship between the third party and the CFAS and may be met with legal action at the discretion of the CFAS.

I have read the above requirements, understand them and agree to abide by the policy, submitted the accompanying documents and upon signature agree to fulfill the criteria for use of the CFAS Compliance Seal

Name	Signature	Date
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For CFAS Office Internal Use Only		
First Year	Last Renewed	Approved by
Payment Received	Payment Details	Seal sent



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Example of a CFAS Compliant IVF Outcome Report for Non-PGT-A Cycles

Time Period to Which the Data Refers	January 2018 to December 2020
Main Outcome Measure	Clinical Pregnancy defined as the presence of a gestational sac on ultrasound
Excluding Fertility Preservation, Number of Egg Collections Performed for patients using their own eggs	900
Number that did not result in at least one embryo transfer (fresh or frozen)	90 (10%)
Number of Primary Embryo Transfers	810
Total # of Embryo Transfers (Fresh + Frozen)	1080

Fresh Embryo Transfers (non-PGT-A, patients using own eggs)

Patient Age	N (420)	Clinical Pregnancy Rate
< 35	200	45%
35-37	100	33%
38-40	80	28%
41-42	30	18%
43 or older	10	10%

Frozen-Thaw Embryo Transfers (non-PGT-A, patients using own eggs)

Patient Age	N (660)	Clinical Pregnancy Rate
< 35	300	45%
35-37	200	33%
38-40	100	28%
41-42	40	18%
43 or older	20	10%



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Primary Transfers (non-PGT-A, patients using own eggs)

Patient Age	N (810)	Clinical Pregnancy Rate
< 35	450	45%
35-37	180	33%
38-40	130	28%
41-42	40	18%
43 or older	10	10%

Cumulative Chance of Pregnancy Per Retrieval that Resulted in At least One Embryo Transfer (non-PGT-A, patients using own eggs)

Patient Age	N (810)	Clinical Pregnancy Rate
< 35	450	50%
35-37	180	38%
38-40	130	33%
41-42	40	20%
43 or older	10	15%



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CFAS Compliant IVF Outcome Report for Non-PGT-A Cycles

Time Period to Which the Data Refers	<i>Must be at least one year but not more than 3 years</i>
Main Outcome Measure	<i>Must be clinical pregnancy, ongoing pregnancy, or live birth, using CARTR Plus definitions</i>
Excluding Fertility Preservation and PGT-A, Number of Egg Collections Performed for patients using their own eggs	
Number that did not result in at least one embryo transfer (fresh or frozen)	
Number of Primary Embryo Transfers	
Total # of Embryo Transfers (Fresh + Frozen)	

Fresh Embryo Transfers (non-PGT-A, patients using own eggs)

Patient Age	N	<i>Success Rate, e.g., Clinical Pregnancy Rate, On-Going Pregnancy Rate or Live Birth Rate</i>
< 35		
35-37		
38-40		
41-42		
43 or older		



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Frozen-Thaw Embryo Transfers (non-PGT-A, patients using own eggs)

Patient Age	N	<i>Success Rate, e.g., Clinical Pregnancy Rate, On-Going Pregnancy Rate or Live Birth Rate</i>
< 35		
35-37		
38-40		
41-42		
43 or older		

Primary Transfers (non-PGT-A, patients using own eggs)

Patient Age	N	<i>Success Rate, e.g., Clinical Pregnancy Rate, On-Going Pregnancy Rate or Live Birth Rate</i>
< 35		
35-37		
38-40		
41-42		
43 or older	10	

Cumulative Chance Per Retrieval that Resulted in At least One Embryo Transfer (non-PGT-A, patients using own eggs)

Patient Age	N	<i>Success Rate, e.g., Clinical Pregnancy Rate, On-Going Pregnancy Rate or Live Birth Rate</i>
< 35		
35-37		
38-40		
41-42		
43 or older		



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CFAS Compliant IVF Outcome Report for PGT-A Cycles

Time Period to Which the Data Refers	<i>Must be at least one year but not more than 3 years</i>
Main Outcome Measure	<i>Must be clinical pregnancy, ongoing pregnancy, or live birth, using CARTR Plus definitions</i>
Number of Egg Collections Performed for patients using their own eggs in which PGT-A was planned	
Number that did not result in at least one embryo transfer (fresh or frozen)	
Number of Primary Embryo Transfers	
Total # of Embryo Transfers involving PGT-A tested embryos	

Frozen-Thaw Embryo Transfers (PGT-A, patients using own eggs)

Patient Age	N	<i>Success Rate, e.g., Clinical Pregnancy Rate, On-Going Pregnancy Rate or Live Birth Rate</i>
< 35		
35-37		
38-40		
41-42		
43 or older		



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Primary Transfers (PGT-A, patients using own eggs)

Patient Age	N	<i>Success Rate, e.g., Clinical Pregnancy Rate, On-Going Pregnancy Rate or Live Birth Rate</i>
< 35		
35-37		
38-40		
41-42		
43 or older	10	

Cumulative Chance Per Retrieval that Resulted in At least One Embryo Transfer (PGT-A, patients using own eggs)

Patient Age	N	<i>Success Rate, e.g., Clinical Pregnancy Rate, On-Going Pregnancy Rate or Live Birth Rate</i>
< 35		
35-37		
38-40		
41-42		
43 or older		



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Reporting of IVF Results Check List for CFAS Compliance

Criteria	Yes	No
Divides patients into the CARTR Plus age categories (<35, 35-37, 38-40, 41-42, 43+) <u>and</u> states the number of patients in each group		
Separates patients using their own eggs from those using donor eggs*		
States the exact time period to which the data refers**		
Separates PGT-A and non-PGT-A cycles***		
Clearly states which CARTR definition of clinical or ongoing pregnancy is used		

For PGT-A cycles reports	
<ul style="list-style-type: none"> • The number of egg collections performed in which PGT-A was planned 	
<ul style="list-style-type: none"> • The number of primary embryo transfers 	
<ul style="list-style-type: none"> • The total number of embryo transfers involving PGT-A tested embryos 	
<ul style="list-style-type: none"> • The number of egg collections in which PGT-A was planned that were not associated with an embryo transfer^ 	

	Yes	No
For PGT-A outcome presented in at least 2 of the following: <ul style="list-style-type: none"> ○ Primary Transfers ○ All Frozen-thaw Transfers ○ Cumulative Rate per Egg Retrieval 		
For non PGT-A cycles reports outcome in at least 2 of the following: <ul style="list-style-type: none"> • Fresh Embryo Transfer • Frozen Thawed Embryo Transfer • Primary Embryo Transfers • Cumulative Rate per Egg Retrieval 		

*Pregnancy rates for donor egg cycles do not need to be included for CFAS compliance

**minimum of 1 year and a maximum of three years

*** Clinics may choose to report either only non PGT cycles, both PGT A and non PGT A cycles or only PGT A cycles ^ within one year of egg collection