

# Assisted reproductive technology in Europe, 2000. Results generated from European registers by ESHRE

The European IVF-monitoring programme (EIM)<sup>\*1</sup> for the European Society of Human Reproduction and Embryology (ESHRE)<sup>1</sup>  
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European results of assisted reproductive techniques from treatments initiated during 2000 are presented in this fourth annual report. Data were collected mainly from pre-existing national registers. From 22 countries, 569 clinics reported 279 267 cycles: IVF 126 961, ICSI 99 976, frozen embryo replacement (FER) 45 800 and oocyte donations (OD) 6530. In nine countries where all clinics reported to the register, a total of 142 174 cycles were performed in a population of 166 million, corresponding to 856 cycles per million inhabitants. After IVF and ICSI, the distribution of transfer of one, two, three and  $\geq 4$  embryos was 12.1, 46.7, 33.3 and 6.8%, respectively. Huge differences existed between countries. For IVF, the clinical pregnancy rate per aspiration and per transfer was 24.7 and 28.4%, respectively. For ICSI, the corresponding rates were 26.6% and 28.7%. These figures represent increases of 0.7 and 0.8% compared with 1999. The distribution of singleton, twin, triplet and quadruplet deliveries for IVF and ICSI combined was 73.6, 24.4, 2.0 and 0.04%. This gives a total multiple delivery rate of 26.4%. The range of triplet deliveries after IVF and ICSI ranged from 0.3 to 7.0% between countries. Compared with 1999, the number of reported cycles was increased by 8% and the clinical pregnancy rate per transfer was increased by 0.7% after IVF and by 0.8% after ICSI. The total multiple delivery rates after IVF and ICSI remain unchanged during the last 4 years.

Key words: ESHRE/Europe/ICSI/IVF/register data

## Introduction

This report is the fourth annual ESHRE publication on European data on assisted reproduction technology (ART). The three previous reports, also published in *Human Reproduction* (ESHRE, 2001a,b, 2002), covered treatment cycles during 1997, 1998 and 1999.

Data have been collected from 22 European countries and cover IVF, ICSI, frozen embryo replacements (FER) and oocyte donations (OD) initiated during 2000. Data from each participating country were sent to ESHRE once a year. A draft report is made and then scrutinized by all consortium members, listed in the Appendix.

A Consortium meeting was held at the ESHRE meeting in Madrid in July 2003 with representatives from participating countries, where the present and future reporting systems were discussed. Here it was noted that Germany reported a marked increase in the coverage in their register. Belgium, Hungary and Switzerland were planning to advance their registration

systems from voluntary, non-governmental registers to mandatory registers run by the authorities. Austria will be able to provide data for 2001.

The Consortium noted that the quality of data still differs between countries. Data collection systems, coverage, definitions and validation are different. At the Madrid meeting, it was decided that the EIM Consortium members should adapt to the definitions suggested by ICMART (The International Committee on the Monitoring of ART) and published by the World Health Organization (2002).

The Consortium again noted that the quality of data needs to be improved in the future. European countries still have different data collection systems with a variable degree of coverage, loss to follow-up and with different definitions. The Consortium decided to continue to present annual reports and to try to improve the quality of the reports.

## Materials and methods

### National registers

A total of 16 countries had pre-existing data collection programmes for 1999, and therefore provided data directly from these sources. In Greece, Ireland, Italy, Poland, Slovenia and Ukraine, where no such

\*EIM Committee: Chairman, K.G.Nygren; co-ordinator, A.Nyboe Andersen; member L.Gianaroli. See Appendix for contributing centres and contacts representing the data collection programmes in the participating European countries.

register existed, national data were collected *de novo* for the purpose of the EIM programme. Details regarding the registers have been described previously (ESHRE, 2001a).

#### **Data collection**

The present report summarizes data from IVF treatments performed from January 1, 2000 to December 31, 2000. Follow-up data on pregnancies and deliveries are cohort data.

Registers from a number of countries have been unable to provide some of the data. Lack of such specific variables will appear in the tables as 'not available' (NA).

The reporting principle used for 2000 data is similar to preceding years (ESHRE, 2001a,b, 2002).

In most countries, reports of pregnancies are based on the presence of one or more intrauterine gestational sacs at sonography ~5 weeks after embryo transfer. Deliveries were normally reported within the same reporting system as for treatments and pregnancies. For the present report, the definitions of pregnancies and births have not been standardized.

As the data presented here are incomplete and generated through different methods using different definitions in different countries, interpretation of the data must be done with some caution.

## **Results**

### **Number of treatment cycles**

Table I shows the number of all treatment cycles recorded in each country, the number of clinics in the country (if available) and the number and size of clinics reporting to the register. The cycles are subdivided into IVF, ICSI, FER and OD. In Belgium, Iceland and Slovenia, the number of aspirations was used, as the number of initiated cycles was not available. In total, 569 clinics from 22 countries reported 279 267 cycles.

Table II shows data from those nine countries where all clinics have reported to the register: Denmark, Finland, France, Iceland, The Netherlands, Norway, Sweden, Switzerland and the UK. The number of cycles are related to the total population in the country. In addition, the number of infants born after ART is expressed as a percentage of the total number of live born in the country. Overall, 142 174 cycles were undertaken in a population of 166 million, giving a mean of 856 cycles per million. The percentage of infants born after ART ranged from 1.0 to 3.8%.

### **Size of the clinics**

Table III shows the size distribution of the 569 reporting clinics. The size of a clinic (or unit) is based on all cycles performed during the year.

### **Age distribution**

Table IV shows the age distribution of the treated women in various countries. In the different countries, the age range of women <29 years was 5–49%; 30–34 years, 25–43%; 35–39 years, 17–50%; and ≥40 years, 4–20%.

### **Number of embryos transferred**

Table V shows the number of embryos transferred after IVF and ICSI combined. The total number of single embryo transfers was 20 756 (12.1%), dual embryo transfers 79 917

(46.7%), triple embryo transfers 57 082 (33.3%) and ≥4 embryo transfers 11 715 (6.8%). As indicated in the table, marked differences were seen between countries. The range of triple embryo transfers was 3.8–50.5% and the range of transfer of ≥4 embryos was 0.0–43.4%.

Data on elective single embryo transfer (eSET) were available from four countries, reporting 2295 transfers (Belgium 564, France 1444, Slovenia 6 and Sweden 281).

### **Pregnancies and deliveries after treatment**

Table VI–IX show the number of pregnancies and deliveries in relation to the number of initiated cycles, aspirations and transfers, for IVF (Table VI), ICSI (Table VII), FER (Table ) and OD (Table IX).

Table VI shows that after IVF, the 27 876 pregnancies resulted from 98 181 embryo transfers. Thus, the mean clinical pregnancy rate per embryo transfer was 28.4%, with a range from 20.4 to 45.7%. The delivery rates per embryo transfer after IVF have not been summarized due to incomplete follow-up of pregnancies in many countries, as shown in Table X.

Table VII shows that after ICSI, the 25 128 pregnancies resulted from 87 456 embryo transfers. Thus the mean clinical pregnancy rate per embryo transfer was 28.7%, with a range from 20.5 to 44.3%. The delivery rates per embryo transfer after ICSI have not been summarized due to incomplete follow-up of pregnancies in many countries, as shown in Table X.

Table VIII shows that after FER, 6663 pregnancies resulted from 40 155 transfers. Thus the mean clinical pregnancy rate per embryo transfer after FER was 16.6%. The delivery rates per embryo transfer after FER have not been summarized due to incomplete follow-up of pregnancies in many countries.

Table IX shows that after OD, 1951 clinical pregnancies resulted from 5925 transfers, giving a pregnancy rate per transfer of 32.9%, with a range from 14.0 to 46.8%.

### **Proportion of singleton, twin, triplet and quadruplet deliveries**

Table X shows the deliveries after IVF and ICSI in relation to singleton, twin, triplet and quadruplet deliveries. It can be seen that the distribution of the deliveries was: singleton 25 336 (73.6%), twin 8396 (24.4%), triplet 674 (2.0%) and quadruplet 13 (0.04%).

Table XI shows the deliveries after FER in relation to singleton, twin, triplet and quadruplet deliveries. It can be seen that the distribution of the deliveries was: singleton 3632 (84.7%), twin 617 (14.4%), triplet 37 (0.9%) and quadruplet 2 (0.05%).

Table XII shows the proportion of infants born as singletons, twins, triplets and quadruplets after IVF and ICSI treatment.

### **Complications and fetal reductions**

Table XIII presents the incidence of ovarian stimulation syndrome (OHSS) recorded from registers in 17 of the 22 countries. It can be seen that 1586 cases of OHSS were recorded. The number of IVF and ICSI cycles in those 17 countries was 146 342, corresponding to 1.1% of all stimulated cycles. From the same countries, 652 complications of oocyte retrieval were also recorded.

**Table I.** ART in European countries in 2000

Country	IVF clinics in the country		Treatments				
	Clinics	Clinics reporting	IVF	ICSI	FER	OD	All
Belgium	27	25	3316	5667	2340	500	11 823
Czech Republic	16	7	1459	706	376	64	2605
Denmark	16	16	5278	3004	1242	158	9682
Finland	18	17	2651	1672	2876	290	7489
France	93	88	23 347	23 228	10 036	143	56 754
Germany		103	35 285	16 991	10 729	0	63 005
Greece	46	8	2310	3075	259	244	5888
Hungary	8	7	772	1355	12	18	2157
Iceland	1	1	153	103	85	23	364
Ireland	5	3	782	527	261	0	1570
Italy	115	75	6876	9419	2734	806	19 835
Netherlands	13	13	9563	4162	1337	0	15 062
Norway	8	8	2624	1405	311	0	4340
Poland	15	12	10 65	1812	816	35	3728
Portugal	16	11	896	1063	120	0	2079
Slovenia	3	3	957	1046	371	0	2374
Russia	30	21	4155	1440	316	452	6363
Spain	182	36	3974	6645	2323	1577	14 519
Sweden	15	15	4048	3749	1408	0	9205
Switzerland	17	17	954	2010	1680	0	4644
UK	75	75	15 694	10 645	6160	2135	34 634
Ukraine	10	8	802	252	8	85	1147
All	>729	569	126 961	99 976	45 800	6530	279 267

FER relates to thawings. Netherlands, transfers.

In Germany and Switzerland, FER refers to 2PN cryopreservation.

**Table II.** ART in 2000 in those European countries where all clinics reported to the national register

	Cycles	Population	Cycles/million	ART deliveries	ART infants	National births	ART infants, %
Denmark	9682	5.29	1830	2457	2457	67 081	3.7%
Finland	7489	5.18	1446	1184	1293	56 742	2.3%
France	56 754	59.08	961	8357	10 334	744 791	1.4%
Iceland	364	0.28	1300	102	166	4315	3.8%
Netherlands	15 062	15.93	946	NA	NA		
Norway	4340	4.47	971	860	1223	59 234	2.1%
Sweden	9205	8.87	1038	1854	2253	90 441	2.5%
Switzerland	4644	7.21	644	783	809	78 458	1.0%
UK	34 634	59.76	580	5553	7677	679 029	1.1%
All	142 174	166.07	856				

Number of reported cycles, deliveries and infants in relation to the population and the national number of live born. Cycles include IVF, ICSI, FER and OD.

Table XIII also gives data on the number of recorded fetal reductions. In total, 256 fetal reductions were recorded.

#### **Parameters of excellence'**

One 'parameter of excellence', defined as the number of deliveries per embryo transferred or the number of deliveries per embryo replaced, can be calculated. After IVF and ICSI, 20 countries replaced 398 952 embryos and this resulted in 35 928 deliveries. The number of embryos transferred for each delivery was thus 11.1. The number of deliveries per embryo replaced was 0.09. Considering these figures, it is important to realize that a number of pregnancies are lost to follow-up, so this remains an estimate.

Another 'parameter of excellence' could be the number of singleton deliveries per transfer. After IVF and ICSI, 20 countries reported 25 336 singleton deliveries after 167 097 transfers. The singleton delivery rate per transfer was thus 15.2%. Considering this figure, it is important to realize that a

number of pregnancies are lost to follow-up, so the true singleton delivery rate remains unknown.

#### **Preimplantation genetic diagnosis (PGD)**

PGD was recorded in seven countries: Belgium, Denmark, Greece, Hungary, Italy, Portugal and Russia. A total of 543 cycles, 533 aspirations and 362 transfers resulted in 106 pregnancies and 78 deliveries. This gives a clinical pregnancy rate of 19.5% per cycle, 19.9% per aspiration and 29.2 per transfer.

The main countries reporting PGD were Italy with 306 and Belgium with 198 cycles.

#### **Discussion**

The present report is the fourth consecutive European report on IVF data covering treatment cycles from 1997, 1998, 1999 and 2000, respectively.

**Table III.** Size of IVF clinics reporting to the register

Country	IVF clinics in the country		Size of the clinics				
	Clinics	Clinics reporting	<100 cycles	100–199 cycles	200–499 cycles	500–1000 cycles	>1000 cycles
Belgium	27	25	2	6	10	5	2
Czech Republic	16	7	1	1	3	2	0
Denmark	16	16	1	1	4	9	1
Finland	18	17	2	1	9	3	2
France	93	88	5	6	28	36	13
Germany		103	16	11	29	25	22
Greece	46	8	0	3	3	1	1
Hungary	8	7	2	1	3	1	0
Iceland	1	1	0	0	1	0	0
Ireland	5	3	0	1	1	1	0
Italy	115	75	25	24	12	12	2
Netherlands	13	13	0	1	0	6	6
Norway	8	8	0	0	5	3	0
Poland	15	12	4	3	3	2	0
Portugal	16	11	3	4	3	1	0
Slovenia	3	3	0	0	1	1	1
Russia	30	21	5	8	5	3	0
Spain	182	36	4	9	14	6	3
Sweden	15	15	2	0	3	7	3
Switzerland	17	17	4	6	4	2	1
UK	75	75	7	17	20	24	7
Ukraine	10	8	4	2	2	0	0
All	>729	569	87	105	163	150	64

**Table IV.** Percentage age distribution of women treated with IVF and ICSI

Country	<29 years	30–34 years	35–39 years	>40 years
Belgium	23%	37%	26%	13%
Czech Republic	49%	30%	17%	4%
Denmark	22%	40%	32%	7%
Finland	19%	32%	29%	20%
France	20%	39%	33%	13%
Germany	18%	38%	33%	11%
Greece	9%	37%	39%	15%
Hungary	28%	37%	25%	11%
Iceland	23%	29%	39%	9%
Ireland	5%	34%	46%	15%
Italy	13%	34%	36%	17%
Netherlands	NA			
Norway	NA			
Poland	23%	35%	27%	15%
Portugal	18%	43%	33%	6%
Russia	25%	29%	29%	16%
Slovenia	14%	25%	50%	11%
Spain	14%	37%	37%	11%
Sweden	14%	36%	36%	13%
Switzerland	13%	35%	36%	16%
UK	9%	36%	38%	14%
Ukraine	37%	33%	22%	7%
All, range	5–49%	25–43%	17–50%	4–20%

The number of countries that reported to the EIM consortium and contributed to the fourth report is unchanged from 1999 and constitutes 22 countries, covering the whole of Western Europe with the exception of Austria (who is likely to join next year) and Luxembourg (no IVF clinic).

Nine of the participating countries already have complete coverage in their reporting system: Denmark, Finland, France,

Iceland, The Netherlands, Norway, Sweden, Switzerland and the UK. Germany has improved its coverage, now estimated to include close to 100% of the activities in the country.

The number of reported cycles continues to grow. In 2000, 569 clinics reported 279 267 cycles, which is an increase of 8% compared with 1999. From 1997 to 1998, the increase was 14% and from 1998 to 1999 it was 11%. Altogether this means an increase from 203 893 cycles in 1997 to 279 267 in 2000, equivalent to an increase of 37% over the 4 years. This marked increase during the period is partly due to a better coverage in the reporting systems but is also due to a true expansion of activities in some countries. The latest world report on IVF data (Adamson *et al.*, 2002) from 1998 recorded 388 000 procedures world-wide, estimated to represent some 80% of all activities. In the USA, 88 077 cycles were recorded from 1999 (ASRM/SART Registry, 2002). This means that ~60% of recorded IVF activities globally come from Europe.

Within Europe, the largest contributions come from Germany with 63 000 cycles, followed by France with 57 000 cycles and the UK with 34 000 reported cycles. However, Italy, where the reporting is conducted in order to provide the EIM data on a voluntary basis, also reported close to 20 000 cycles in 2000. Spain, another of the large European countries, only has data from 36 of ~180 clinics. Although it may primarily be the larger clinics that reported the 14 500 cycles from Spain, it is likely that only a minor proportion of the Spanish ART activity is being reported to the EIM consortium.

The proportion of standard IVF procedures to ICSI procedures remained the same in 2000 compared with the previous 2 years (56.0% standard IVF and 44% ICSI), but in some countries, such as Belgium, Greece, Hungary, Italy, Poland, Portugal, Slovenia, Spain and Switzerland, ICSI is more

**Table V.** Number of embryos transferred after IVF and ICSI

	All transfers	1 embryo	%	2 embryos	%	3 embryos	%	4+ embryos	%
Belgium	7754	1003	12.9%	3996	51.5%	2229	28.7%	526	6.8%
Czech Republic	1783	198	11.1%	513	28.8%	734	41.2%	338	19.0%
Denmark	7053	990	14.0%	5477	77.7%	586	8.3%	0	0.0%
Finland	3756	1015	27.0%	2525	67.2%	226	6.0%	5	0.1%
France	36 406	5055	13.9%	16 677	45.8%	11 144	30.6%	1747	4.8%
Germany	40 928	4689	11.5%	18 154	44.4%	18 085	44.2%	0	0.0%
Greece	4713	432	9.2%	786	16.7%	1496	31.7%	1999	42.4%
Hungary	1853	141	7.6%	355	19.2%	885	47.8%	472	25.5%
Iceland	235	22	9.4%	164	69.8%	49	20.9%	0	0.0%
Ireland	1144	81	7.1%	462	40.4%	578	50.5%	23	2.0%
Italy	13 150	1745	13.3%	4396	33.4%	5016	38.1%	1993	15.2%
Poland	2563	431	16.8%	1458	56.9%	535	20.9%	139	5.4%
Portugal	1625	176	10.8%	569	35.0%	783	48.2%	97	6.0%
Russia	5005	529	10.6%	974	19.5%	1657	33.1%	1774	35.4%
Slovenia	1600	327	20.4%	1042	65.1%	231	14.4%	0	0.0%
Spain	8857	830	27.0%	1956	22.1%	3933	44.4%	2138	24.1%
Sweden	6586	829	12.6%	5507	83.6%	249	3.8%	0	0.0%
Switzerland	2537	340	13.4%	1467	57.8%	687	27.1%	43	1.7%
UK	22 783	1825	8.0%	13 261	58.2%	7697	33.8%	0	0.0%
Ukraine	970	89	9.2%	178	18.4%	282	29.1%	421	43.4%
All	171 301	20 747	12.1%	79 917	46.7%	57 082	33.3%	11 715	6.8%

Data from The Netherlands and Norway not available.

**Table VI.** Pregnancies and deliveries after IVF

	Initiated cycles	Aspirations	Transfers	Pregnancies	Deliveries	Pregnancies per cycle	Pregnancies per aspiration	Pregnancies per transfer	Deliveries per cycle	Deliveries per aspiration	Deliveries per transfer
Belgium	3316	2944	2708	775	619	23.4%	26.3%	28.6%	18.7%	21.0%	22.9%
Czech Republic	1459	1395	1166	357	232	24.5%	25.6%	30.6%	15.9%	16.6%	19.9%
Denmark	5278	4999	4418	1395	1097	26.4%	27.9%	31.6%	20.8%	21.9%	24.8%
Finland	2651	2546	2242	671	530	25.3%	26.4%	29.9%	20.0%	20.8%	23.6%
France	23 347	20 513	17 433	4654	3508	19.9%	22.7%	26.7%	15.0%	17.1%	20.1%
Germany	35 285	30 353	25 327	6827	4489	19.3%	22.5%	27.0%	12.7%	14.8%	17.7%
Greece	2310	2138	1929	645	487	27.9%	30.2%	33.4%	21.1%	22.8%	25.2%
Hungary	772	699	630	183	137	23.7%	26.2%	29.0%	17.7%	19.6%	21.7%
Iceland	153	153	138	63	53	41.2%	41.2%	45.7%	34.6%	34.6%	38.4%
Ireland	782	725	682	166	135	21.2%	22.9%	24.3%	17.3%	18.6%	19.8%
Italy	6876	6061	5235	1421	1106	20.7%	23.4%	27.1%	16.1%	18.2%	21.1%
Netherlands	9563	8426	7294	2374		24.8%	28.2%	32.5%			
Norway	2624	2463	2229	654	549	24.9%	26.6%	29.3%	20.9%	22.3%	24.6%
Poland	1065	1022	898	183	139	17.2%	17.9%	20.4%	13.1%	13.6%	15.5%
Portugal	896	807	725	178	125	19.9%	22.1%	24.6%	14.0%	15.5%	17.2%
Russia	4155	3793	3615	1100	607	26.5%	29.0%	30.4%	14.6%	16.0%	16.8%
Slovenia	957	902	789	256	199	26.8%	28.4%	32.4%	20.8%	22.1%	25.2%
Spain	3974	3406	3032	982	601	24.7%	28.8%	32.4%	15.1%	17.6%	19.8%
Sweden	4048	3699	3392	1146	889	28.3%	31.0%	33.8%	22.0%	24.0%	26.2%
Switzerland	954	871	769	176	140	18.4%	20.2%	22.9%	14.7%	16.1%	18.2%
UK	15 694	14 015	12 794	3489	2725	22.2%	24.9%	27.3%	17.4%	19.4%	21.3%
Ukraine	802	778	736	181	128	22.6%	23.3%	24.6%	16.0%	16.5%	17.4%
All	126 961	112 708	98 181	27 876		22.0%	24.7%	28.4%			

See Table X for loss to follow-up of pregnancies.

prevalent than IVF. The number of reported FER cycles as well as OD cycles showed a marked increase in 2000 compared with 1999.

The availability of services remained highest in Denmark, with 1830 cycles per million inhabitants. It was also high in the other Nordic countries and in The Netherlands and France. The average number of treatment cycles per million inhabitants in those countries with complete coverage in their reporting was 856. The proportion of IVF children to all children born was

again highest in the Nordic countries, ranging from 2.1 to 3.8%.

The number of embryos transferred in IVF and ICSI cycles again differed substantially between countries. The mean number of single embryo transfers remained at ~12%, whereas the proportion of dual embryo transfers increased from 39.2% in 1999 to 46.7% in 2000. The proportion of three embryo transfers decreased from 39.6% in 1999 to 33.3% in 2000. Four embryo transfers also decreased from 9.3% in 1999 to 6.8% in

**Table VII.** Pregnancies and deliveries after ICSI

	Cycles	Aspirations	Transfers	Pregnancies	Deliveries	Pregnancies per cycle	Pregnancies per aspiration	Pregnancies per transfer	Deliveries per cycle	Deliveries per aspiration	Deliveries per transfer
Belgium	5667	5318	5046	1443	1172	25.5%	27.1%	28.6%	20.7%	22.0%	23.2%
Czech Republic	706	694	617	146	101	20.7%	21.0%	23.7%	14.3%	14.6%	16.4%
Denmark	3004	2884	2635	846	685	28.2%	29.3%	32.1%	22.8%	23.8%	26.0%
Finland	1672	1638	1514	417	323	24.9%	25.5%	27.5%	19.3%	19.7%	21.3%
France	23 228	20 921	18 973	5419	3913	23.3%	25.9%	28.6%	16.8%	18.7%	20.6%
Germany	16 991	16 441	15 601	4176	2804	24.6%	25.4%	26.8%	16.5%	17.1%	18.0%
Greece	3075	2947	2784	928	672	30.2%	31.5%	33.3%	21.9%	22.8%	24.1%
Hungary	1355	1328	1223	351	242	25.9%	26.4%	28.7%	17.9%	18.2%	19.8%
Iceland	103	103	97	43	35	41.7%	41.7%	44.3%	34.0%	34.0%	36.1%
Ireland	527	479	462	113	90	21.4%	23.6%	24.5%	17.1%	18.8%	19.5%
Italy	9419	8672	7915	2084	1735	22.1%	24.0%	26.3%	18.4%	20.0%	21.9%
Netherlands	4162	3840	3579	1266	NA	30.4%	33.0%	35.4%			
Norway	1405	1333	1226	327	275	23.3%	24.5%	26.7%	19.6%	20.6%	22.4%
Poland	1812	1762	1665	537	418	29.6%	30.5%	32.3%	23.1%	23.7%	25.1%
Portugal	1063	966	900	217	155	20.4%	22.5%	24.1%	14.6%	16.0%	17.2%
Russia	1440	1398	1390	394	224	27.4%	28.2%	28.3%	15.6%	16.0%	16.1%
Slovenia	1046	995	811	255	203	24.4%	25.6%	31.4%	19.4%	20.4%	25.0%
Spain	6645	6233	5833	2002	1253	30.1%	32.1%	34.3%	18.9%	20.1%	21.5%
Sweden	3749	3513	3194	988	771	26.4%	28.1%	30.9%	20.6%	21.9%	24.1%
Switzerland	2010	1947	1768	455	336	22.6%	23.4%	25.7%	16.7%	17.3%	19.0%
UK	10 645	10 637	9989	2673	2141	25.1%	25.1%	26.8%	20.1%	20.1%	21.4%
Ukraine	252	247	234	48	33	19.0%	19.4%	20.5%	13.1%	13.4%	14.1%
All	99 976	94 296	87 456	25 128		25.1%	26.6%	28.7%			

See Table X for loss to follow-up of pregnancies.

**Table VIII.** Pregnancies and deliveries after FER

	Thawings	Transfers	Pregnancies	Deliveries	Pregnancies per thawing	Pregnancies per transfer	Deliveries per thawing	Deliveries per transfer
Belgium	2340	1879	263	207	11.2%	14.0%	8.8%	11.0%
Czech Republic	507	464	45	20	8.9%	9.7%	3.9%	4.3%
Denmark	1242	970	163	135	13.1%	16.8%	10.9%	13.9%
Finland	2876	2488	448	331	15.6%	18.0%	11.5%	13.3%
France	10 036	8753	1284	936	12.8%	14.7%	9.3%	10.7%
Germany	10 729	9546	1541	937	14.4%	16.1%	8.7%	9.8%
Greece	259	247	76	51	29.3%	30.8%	19.7%	20.6%
Hungary	12	8	3	0	25.0%	37.5%	0.0%	0.0%
Iceland	85	83	21	14	24.7%	25.3%	16.5%	16.9%
Ireland	261	219	43	34	16.5%	19.6%	13.0%	15.5%
Italy	2734	2368	462	350	16.9%	19.5%	12.8%	14.8%
Netherlands		1337	270	NA		20.2%		
Norway	311	225	43	36	13.8%	19.1%	11.6%	16.0%
Poland	816	697	94	75	11.5%	13.5%	9.2%	10.8%
Portugal	120	107	19	7	15.8%	17.8%	5.8%	6.5%
Russia	316	279	50	33	15.8%	17.9%	10.4%	11.8%
Slovenia	371	340	51	38	13.7%	15.0%	10.2%	11.2%
Spain	2323	1872	366	245	15.8%	19.6%	10.5%	13.1%
Sweden	1408	1208	259	194	18.4%	21.4%	13.8%	16.1%
Switzerland	1680	1487	246	184	14.6%	16.5%	11.0%	12.4%
UK	6160	5569	914	697	14.8%	16.4%	11.3%	12.5%
Ukraine	8	8	2	1	25.0%	25.0%	12.5%	12.5%
All		40 154	6663			16.6%		

2000. Denmark, Finland and Sweden report a low proportion of three embryo transfers.

For the first time, the data from 2000 included the number of eSETs. Data were only available from four countries reporting 2295 eSETs. National implementation of eSET has only

occurred during recent years and, as discussed, the number of singleton deliveries was not changed in 2000, compared with earlier years.

It is noteworthy that the overall occurrence of multiple deliveries after IVF and ICSI (26.9%) in 2000 was similar to

**Table IX.** Pregnancies and deliveries after oocyte donation (OD)

	Donation cycles	All transfers	All pregnancies	Deliveries	Pregnancies per donation	Pregnancies per transfer	Deliveries per donation	Deliveries per transfer
Belgium	500	359	86	70	17.2%	24.0%	14.0%	
Czech Republic	78	50	7	1	9.0%	14.0%	1.3%	2.0%
Denmark	158	132	47	26	29.7%	35.6%	16.5%	19.7%
Finland	NA	290	91	61		31.4%		21.0%
France	143	214	41	NA	28.7%	19.2%		
Germany	0	0						
Greece	244	223	71	33	29.1%	31.8%	13.5%	14.8%
Hungary	18	16	6	NA	33.3%	37.5%		
Iceland	23	20	9	8	39.1%	45.0%	34.8%	40.0%
Ireland	0	0						
Italy	806	722	214	161	26.6%	29.6%	20.0%	22.3%
Netherlands	NA	NA						
Norway	0	0						
Poland	35	35	11	11	31.4%	31.4%	31.4%	31.1%
Portugal	0	0		0				
Russia	452	383	137	89	30.3%	35.8%	19.7%	23.2%
Slovenia	0	0						
Spain	1577	1416	662	357	42.0%	46.8%	22.6%	25.2%
Sweden	0	0						
Switzerland	0	0						
UK	2135	1982	549	403	25.7%	27.7%	18.9%	20.3%
Ukraine	85	83	20	15	23.5%	24.1%	17.6%	18.1%
All		5925	1951			32.9%		

In France, donation cycles are counted as recipient cycles.

**Table X.** Singleton, twin, triplet and quadruplet deliveries after IVF and ICSI

	All deliveries	Clinical pregnancies	Documented pregnancy loss	Lost to follow-up	Singleton deliveries	%	Twin deliveries	%	Triplet deliveries	%	Quadruplet deliveries	%
Belgium	1791	2218	427	NA	NA		NA		NA		NA	
Czech Republic	333	499	117	22	232	69.7%	91	27.3%	10	2.0%	0	0.0%
Denmark	1782	2241	396	63	1308	73.4%	470	26.4%	4	0.2%	0	0.0%
Finland	853	1088	230	5	688	80.7%	228	26.7%	2	0.2%	0	0.0%
France	7421	10 073	3269	178	5620	75.7%	1726	23.3%	74	1.0%	2	0.0%
Germany	7293	11 003	2598	1112	5439	74.6%	1679	23.0%	173	2.4%	2	0.0%
Greece	1159	1502	197	146	791	68.2%	347	29.9%	21	1.8%	0	0.0%
Hungary	379	534	142	11	252	66.5%	107	28.2%	20	5.3%	0	0.0%
Iceland	88	106	18	0	56	63.6%	31	35.2%	1	1.1%	0	0.0%
Ireland	225	274	49		161	71.6%	56	24.9%	8	3.6%	0	0.0%
Italy	2841	3505	533	132	2165	76.2%	571	20.1%	97	3.4%	8	0.3%
Netherlands	NA	3640	842	NA	NA		NA		NA		NA	
Norway	824	981	160	0	601	72.9%	282	34.2%	4	0.5%	0	0.0%
Poland	557	720	114	49	421	75.6%	127	22.8%	8	1.4%	0	0.0%
Portugal	280	395	69	45	198	70.7%	66	23.6%	15	5.4%	0	0.0%
Russia	831	1494	284	315	601	72.3%	200	24.1%	30	3.6%	0	0.0%
Slovenia	402	511	90	17	307	76.4%	92	22.9%	3	0.7%	0	0.0%
Spain	1854	2984	543	587	1254	67.6%	526	28.4%	73	3.9%	1	0.1%
Sweden	1660	2134	467	7	1292	77.8%	362	21.8%	6	0.4%	0	0.0%
Switzerland	476	631	138	18	364	76.5%	103	21.6%	9	1.9%	0	0.0%
UK	4856	6162	489	817	3488	71.8%	1258	25.9%	110	2.3%	0	0.0%
Ukraine	161	229	43	25	98	60.9%	74	46.0%	6	3.7%	0	0.0%
All		52 924	11 215	3549	25 336	73.6%	8396	24.4%	674	2.0%	13	0.04%

the figure 4 years earlier in 1997. There has been a change however, as the number of triplet deliveries has been reduced from 3.6% in 1997, to 2.3% in both 1998 and 1999 and to 2.0% in 2000. Regarding triplet rates, huge differences exist between countries.

This is the first report on the overall practice of fetal reduction in Europe. In total, 256 procedures were reported, but

data are not available from a number of countries, so it is likely that far more procedures have been done.

Pregnancy rates for IVF, ICSI and FER continued to increase slightly. For IVF, the mean pregnancy rate per transfer is now 28.4% compared with 27.7% in 1999. For ICSI, it is 28.7% compared with 27.9% in 1999. For FER, it is 16.6% compared with 15.7% in 1999.

**Table XI.** Singleton, twin, triplet and quadruplet deliveries after FER

	All deliveries	Clinical pregnancies	Documented pregnancy loss	Lost to follow-up	Singleton deliveries	%	Twin deliveries	%	Triplet deliveries	%	Quadruplet deliveries	%
Belgium	207	263	56	NA	NA	NA	NA	0.0%	0	0.0%	0	0.0%
Czech Republic	20	45	14	1	16	80.0%	4	20.0%	0	0.0%	0	0.0%
Denmark	135	163	27	1	107	79.3%	28	20.7%	0	0.0%	0	0.0%
Finland	331	448	111	6	291	87.9%	38	11.5%	2	0.6%	0	0.0%
France	936	1284	291	57	775	82.8%	125	13.4%	5	0.5%	0	0.0%
Germany	937	1541	483	121	790	84.3%	137	14.6%	9	1.0%	1	0.1%
Greece	51	74	11	12	37	72.5%	14	27.5%	0	0.0%	0	0.0%
Hungary	0	2	1	1	0							
Iceland	14	21	7	0	11	78.6%	3	21.4%	0	0.0%	0	0.0%
Ireland	34	43	8		25	73.5%	7	20.6%	2	5.9%	0	0.0%
Italy	350	462	83	29	313	89.4%	34	9.7%	3	0.9%	0	0.0%
Netherlands	NA	270	84	NA	NA	NA	NA	NA	NA	NA	NA	NA
Norway	36	43	7	0	26	72.2%	10	27.8%	0	0.0%	0	0.0%
Poland	75	94	19	0	67	89.3%	8	10.7%	1	1.3%	0	0.0%
Portugal	7	19	4	8	7	100.0%	0	0.0%	0	0.0%	0	0.0%
Russia	33	53	11	4	29	87.9%	4	12.1%	0	0.0%	0	0.0%
Slovenia	38	51	4	8	38	100.0%	0	0.0%	0	0.0%	0	0.0%
Spain	245	366	92	29	196	80.0%	46	18.8%	3	1.2%	0	0.0%
Sweden	194	259	65	0	169	87.1%	25	12.9%	0	0.0%	0	0.0%
Switzerland	184	246	55	8	157	85.3%	26	14.1%	1	0.5%	0	0.0%
UK	697	914	75	142	577	82.8%	108	15.5%	11	1.6%	1	0.1%
Ukraine	1	2	1	0	1	100.0%	0	0.0%	0	0.0%	0	0.0%
All		6663			3632	84.7%	617	14.4%	37	0.9%	2	0.05%

**Table XII.** Percentage of infants born as singletons, twins, triplets and quadruplets.

	All infants	Singletons	Twins	Triplets	Quadruplets
Belgium		NA	NA	NA	NA
Czech Republic	444	52.3%	41.0%	6.8%	0.0%
Denmark	2260	57.9%	41.6%	0.5%	0.0%
Finland	1150	59.8%	39.7%	0.5%	0.0%
France	9302	60.4%	37.1%	2.4%	0.1%
Germany	9324	58.3%	36.0%	5.6%	0.1%
Greece	1548	51.1%	44.8%	4.1%	0.0%
Hungary	526	47.9%	40.7%	11.4%	0.0%
Iceland	121	46.3%	51.2%	2.5%	0.0%
Ireland	297	54.2%	37.7%	8.1%	0.0%
Italy	3630	59.6%	31.5%	8.0%	0.9%
Netherlands		NA	NA	NA	NA
Norway	1177	51.1%	47.9%	1.0%	0.0%
Poland	899	46.8%	28.3%	2.7%	0.0%
Portugal	375	52.8%	35.2%	12.0%	0.0%
Russia	1239	50.2%	42.3%	7.5%	0.0%
Slovenia	500	61.4%	36.8%	1.8%	0.0%
Spain	2529	49.6%	41.6%	8.7%	0.2%
Sweden	2034	63.5%	35.6%	0.9%	0.0%
Switzerland	597	61.0%	34.5%	4.5%	0.0%
UK	6334	55.1%	39.7%	5.2%	0.0%
Ukraine	264	37.1%	56.1%	6.8%	0.0%
All	44 587	56.7%	38.7%	4.5%	0.1%

One other possible way to report success rate would be to report on singleton delivery rates, separately. At the present stage where delivery rates are somewhat uncertain in many countries, we have only given the overall figure of 15.2% singleton deliveries per transfer after IVF and ICSI. Further emphasis will be put on this parameter in subsequent reports.

An alternative way of presenting success rate within a single ‘parameter of excellence’ was the number of deliveries per embryo replaced (0.09) equivalent to the use of 11 embryos in order to achieve one delivery after IVF and ICSI.

Altogether, 543 cycles of PGD were reported, compared with 131 in 1999, suggesting an expansion of this activity in the coming years.

The benefit or ‘success’ of ART for couples and for society needs to be monitored and described in terms of efficacy, safety, quality, availability and cost. The present report includes data on efficacy and availability and also on one very important aspect of safety, i.e. multiple pregnancies. The EIM and ESHRE are now planning to expand its ART monitoring activities to include also specific data on safety, quality and cost.

To summarize, the present fourth annual ESHRE report on ART in Europe in 2000 shows a continuing expansion of the register regarding participating clinics and number of cycles reported. Trends are now becoming visible and there is a trend towards better efficacy. Triplet deliveries were less frequent than in earlier years, but the combined multiple pregnancy rate (26.4%) was similar to the figure in 1997. Elective single embryo transfer had minimal overall impact in 2000.

#### Appendix I. Contact persons representing data collection programmes in participating European countries, 2000

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**Table XIII.** Complications and fetal reductions

	OHSS	All complications of oocyte retrieval	Bleeding	Infection	Maternal death	Fetal reduction
Belgium	139	17	8	9	0	27
Czech Republic	25	7	4	2	0	14
Denmark	NA	NA	NA	NA	NA	NA
Finland	NA	NA	NA	NA	NA	NA
Germany	336	377	278	0	0	0
Greece	36	1	2	2	0	73
Hungary	23	1	0	1	0	16
Iceland	2	1	0	1	0	0
Ireland	11	1	2	1	0	0
Italy	255	51	41	10	0	28
Netherlands	NA	NA	NA	NA	NA	NA
Norway	31	9	3	1	0	0
Poland	54	6	6	0	0	0
Portugal	11	0	0	0	0	0
Russia	158	32	29	3	0	0
Slovenia	21	2	2	0	0	0
Spain	75	24	5	5	0	0
Sweden	NA	NA	NA	NA	NA	NA
Switzerland	17	1	0	1	0	1
UK	376	120	6	0		82
Ukraine	16	2	2	0	0	15
All	1586	652	388	36	0	256

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Ukraine: Victor Veselovsky, Clinic Isida IVF, 28/1 Chornovilla Str. Kyiv, 01135, Ukraine. E-mail: vvv@isidaivf.com.ua

### List of participating countries and centres

#### Belgium

Antwerpen: Algemeen Ziekenhuis Middelheim; Universitair Ziekenhuis Edegem; Algemeen Ziekenhuis St-Camillus/St-Augustinus Wilrijk

Brugge: Algemeen Ziekenhuis Sint-Jan

Brussel: Institut médical Edith Cavell; Akademisch Ziekenhuis VUB; Hôpital Universitaire St-Pierre ULB; Hôpital Erasme  
 Charleroi: Clinique Notre-Dame  
 Genk: St-Jansziekenhuis  
 Gent: Universitair Ziekenhuis Gent; Algemeen Ziekenhuis Jan Palfijn; Algemeen Ziekenhuis St-Lucas  
 Kortrijk: St-Niklaaskliniek  
 Liège: Clinique St-Vincent; Hôpital de la Citadelle  
 Leuven: Universitair Ziekenhuis Gasthuisberg; Leuven Institute for Fertility and Embryology  
 Mont sur Sambre: Centre de PMA Sainte Thérèse  
 Namur: Centre Hospitalier Régional de Namur  
 Roeselare: Heilig Hartziekenhuis  
 Vilvoorde: Van Helmontziekenhuis

### **Czech Republic**

List not available

### **Denmark**

Aalborg: Fertilitetsklinikken Aalborg  
 Aarhus: Ciconia Vest; Fertilitetsklinikken Skejby Sygehus; Maigaards Fertilitetsklinik  
 Brædstup: Fertilitetsklinikken Brædstrup Sygehus  
 Copenhagen: Ciconia Øst; Dansk Fertilitetsklinik; Fertilitetsklinikken Helsehuset; Fertilitetsklinikken Herlev Sygehus; Fertilitetsklinikken Rigshospitalet; Fertilitetsklinikken Trianglen; Fertilitetsklinikken, Institut for Human Reproduktion; Gentofte Fertilitetsklinik  
 Horsens: Horsens Fertilitetsklinik  
 Odense: Fertilitetsklinikken Odense Universitetshospital; Odense IVF-Klinik  
 Skive: Fertilitetsklinikken Skive Sygehus

### **Finland**

Helsinki: Diacor Health Services; Eira Hospital; Felicitas Clinic; Helsinki University Central Hospital; The Family Federation of Finland Helsinki Clinic  
 Joensuu: Northern Karelia Central Hospital  
 Jyväskylä: In-Tiimi Clinic Jyväskylä  
 Kuopio: In-Tiimi Clinic Kuopio; Kuopio University Central Hospital  
 Lappeenranta: Fermedi Clinic  
 Oulu: Oulu University Central Hospital; The Family Federation of Finland Oulu Clinic  
 Tampere: AVA Clinic Tampere; Tampere University Central Hospital  
 Turku: AVA Clinic Turku; Turku University Central Hospital; The Family Federation of Finland Turku Clinic

### **France**

Amiens: CHU; Centre Picard  
 Angers: CHR  
 Avignon: Urbain V  
 Bayonne: Lafargue  
 Besançon: CHU; les Cigognes

Bois Guillaume: St Antoine  
 Bordeaux: Pellegrin Fédération; Pellegrin Gynéco-Obstétrique A; Saint Sernin/Jean Villard  
 Brest: CHU; Pasteur  
 Caen: CHRU  
 Charleville-Mézières: CH  
 Clermont-Ferrand: CH  
 Dijon: CHU; Chenove  
 Epinal: Arc en ciel  
 Equeurdreville: Cotentin  
 Grenoble: Belledonne; CHU  
 Guadeloupe: Les Abymes-Les Rosiers  
 Guilherand-Granges: Pasteur  
 Guyane: Cayenne CHG  
 La Réunion: Le Port-Jeanne d'Arc  
 La Rochelle: Le Mail  
 Le Havre: CH  
 Le Mans: Tertre Rouge  
 Lens: CH  
 Lille: Polyclinique du Bois; Jeanne de Flandres  
 Limoges: CHU  
 Lorient: CH  
 Lyon: Bron Ste Marie-Thérèse; Croix Rousse; Edouard Herriot; Montplaisir; Sainte Anne Lumière  
 Marseille: CHU Conception; Renaissance; Saint Joseph; Wulfran-Puget  
 Martinique: Fort de France-Sainte Marie  
 Metz: Ste Croix  
 Montpellier: CHU; Saint Roch  
 Mulhouse: Diaconat  
 Nancy: A.Pinard; Majorelle  
 Nantes: Atlantique; CHU; Notre Dame de Grâce  
 Nice: Saint Georges; CHU  
 Nîmes: CHRU; Grand Sud  
 Paris (area): Aubervilliers La Roseraie; Bagnolet La Dhuys; Blanc Mesnil Clinique; Bondy Jean Verdier; Clamart Béclère; Cormeille-en-Parisis Clinique; Courbevoie-La Défense CH; Dreux CH; Le Chesnay Parly 2 Clinique; Maisons-Laffite Sully; Neuilly Cherest; Neuilly Hôpital Américain; Paris Bichat; Paris Les Bluets; Paris Cochin; Paris Diaconesses; Paris La Muette; Paris Montsouris; Paris Pitié Salpêtrière; Paris Spontini; Paris St Vincent de Paul; Paris Tenon; Poissy CHI; Sèvres J. Rostand; Vitry sur Seine Les Noriets  
 Pau: Lagrange  
 Périgueux: Francheville  
 Perpignan: Saint-Pierre  
 Poitiers: CHU  
 Reims: CHU; Courlancy  
 Rennes: CHU Sud/Hôtel Dieu; la Sagesse  
 Roanne: CH  
 Rouen: CHU  
 Saint-Jean: L'Union et le Vaurais  
 Saint-Saulve: le Parc  
 Schiltigheim: CMCO  
 St Etienne: Michelet  
 Toulon: Saint Michel  
 Toulouse: CHU; St Jean Languedoc  
 Tours: CHU; Parc

**Germany**

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Bad Münder: Zentrum für IVF und Reproduktionsmedizin Deutsche Klinik Bad Münder  
Bayreuth: IVF-Zentrum Bayreuth im Klinikum Bayreuth  
Bedburg: Praxis Dr Dieter Struller  
Berlin: Fertility Center Berlin; Gemeinschaftspraxis Dr med. Matthias Bloechle/Dr med. Silke Marr; Gemeinschaftspraxis Drs med. A.Haase/P.Rott; Gemeinschaftspraxis im Lützow Center Reproduktionsmedizinisches Zentrum; Praxis Dr med. Reinhard Hannen; Praxisklinik für Fertilität; Universitätsklinikum der Humboldt-Universität zu Berlin Charité Campus Mitte; Universitätsklinikum der Humboldt-Universität zu Berlin Charité Campus Virchow-Klinikum  
Bielefeld: BIF Bielefelder Institut für Fortpflanzungsmedizin der Städtischen Kliniken Bielefeld-Rosenhöhe  
Bonn: Universitätsklinikum Bonn  
Bremen: Bremer Zentrum für Fortpflanzungsmedizin (BZF) in der Frauenklinik des Ev. Diakonie-Krankenhauses gGmbH; Zentrum für Kinderwunschbehandlung Bremen  
Darmstadt: Reproduktionsmedizinisches und Endometriose Zentrum Darmstadt  
Deggendorf: Gemeinschaftspraxis Drs Kroiss und Bernhardt  
Dortmund: Gemeinschaftspraxis Drs med. S.Dieterle/A.Neuer  
Dresden: Praxis Dr med. H.J.Held; Universitätsklinikum Carl Gustav Carus  
Düsseldorf: Gemeinschaftspraxis Dr (B) Hugo Verhoeven/Dr med. Michael Scholtes/Dipl. med. Kersten Marx/Dr med. Martina Behler; Städt. Kliniken Düsseldorf gGmbH  
Frauenklinik Benrath; Universitätsfrauenklinik der Heinrich-Heine-Universität-Düsseldorf  
Erlangen: Dr J.van Uem; Gemeinschaftspraxis der Frauenärzte Prof. Dr Dr K.-G.Bregulla/Dr M.Hamori/Dr R.Behrens; Universitätsfrauenklinik Erlangen  
Essen: Gemeinschaftspraxis Dr med. Thomas Katzorke/Dr med. Dirk Propping/Dr med. Susanne Wohlers  
Esslingen: IVF-Zentrum Esslingen  
Frankfurt am Main: Krankenhaus Nordwest  
Freiburg: Frauenklinik der Albert-Ludwigs-Universität; Gemeinschaftspraxis Dr Weitzell/Dr M.Thiemann/Prof. Dr F.Geisthövel  
Gelsenkirchen: Schwerpunkt Kinderwunschtherapie Wissenschaftspark Gelsenkirchen  
Gießen: Arbeitsgruppe Endokrinologie, Fortpflanzungsmedizin und Mikrochirurgie der Justus-Liebig-Universität; Gesellschaft zur Förderung der In-Vitro-Fertilisation und Reproduktionsmedizin GbR  
Göttingen: Dr Monica Tobler; Gemeinschaftspraxis Dr Peter Böhm, Dr Sabine Hübner Dr Rüdiger Moltrecht, Dr Christine

Noeldechen; Klinik für Gynäkologie und Geburtshilfe Georg-August-Universität  
Greifswald: Ernst-Moritz-Arndt-Universität  
Grevenbroich: Gemeinschaftspraxis Dr Tigges/Dr Kaiser/Dr Tuchel  
Haan: Gynäkologisch-Geburtshilfliche Abteilung Gynäkologische Endokrinologie/Reproduktionsmedizin St Josef Krankenhaus GmbH  
Halle: Martin-Luther-Universität Halle-Wittenberg  
Hamburg: Fertility Center Hamburg; Gemeinschaftspraxis Bispink/Horn/Michel and Seeler; Kocak und Kollegen; Praxis BKS; Praxisgemeinschaft Hinrichsen u. Partner GbR am Endokrinologikum Hamburg; Universitätsklinikum Hamburg-Eppendorf  
Hannover: Gynäkologische Gemeinschaftspraxis Dr M.Müseler-Albers/H.P.Arendt/Dr.K.Bühler; Frauenklinik der MHH am Oststadtkrankenhaus  
Heidelberg: Universitätsklinikum Heidelberg Abt. Gynäkologische Endokrinologie und Fertilisationsstörungen Kinderwunsch-Sprechstunde; Kinderwunschzentrum Heidelberg  
Hildesheim: Zentrum für Reproduktionsmedizin und Humanogenetik Hildesheim  
Homburg: Universitätskliniken des Saarlandes  
Jena: Gemeinschaftspraxis Fritzsche/Reiher/Hoffmann; Klinikum der FSU Jena  
Karlsruhe: Karlsruher IVF-Programm  
Kiel: Universitäts-Frauenklinik der Christian-Albrechts-Universität  
Köln: PAN Klinik am Neumarkt; Krankenhaus Porz am Rhein; Universitäts-Frauenklinik Köln  
Leipzig: Praxisklinik; Universitätsfrauenklinik  
Lübeck: Universitätsklinikum Lübeck  
Magdeburg: Otto-von-Guericke-Universität Magdeburg  
Mannheim: Universitätsfrauenklinik Klinikum Mannheim gGmbH  
Marburg: Klinik für Gynäkologie, Gynäkologische Endokrinologie und Onkologie Der Philipps-Universität Marburg  
Minden: Gemeinschaftspraxis Dr med. Onno Buurman/Otto P.Happel  
Mönchengladbach: Gemeinschaftspraxis Dr med. Georg Döhmen/Dr med. Thomas Schalk  
Mühlheim: Ev. Krankenhaus Mühlheim an der Ruhr Frauenklinik und Zentrum für Reproduktionsmedizin  
München: Hormonzentrum München; Kinderwunsch Centrum München an der Frauenklinik Dr Wilhelm Krüsmann; Klinik und Poliklinik für Frauenheilkunde und Geburtshilfe Klinikum der Universität München-Grosshadern; Prof. Dr med. Dieter Berg/Dr med. Bernd Lesoine; Zentrum für Reproduktionsmedizin Dr med. Walter Bollmann/Dr med. Thomas Brückner/Dr med. Ulrich Noss  
Münster: Gemeinschaftspraxis Dr Dr med. Lutz Belkien/PD Dr med. Bernd Krause; Universitätsklinikum Münster Klinik und Poliklinik für Frauenheilkunde und GeburtshilfeInstitut für Reproduktionsmedizin  
Neubrandenburg: Dietrich Bonhoeffer Klinikum Neubrandenburg  
Neuwied: Gemeinschaftspraxis Dr Beran and Dr Müller

Nürnberg: Dr med. J.Neuwinger and Dr med. B.Munzer-Neuwinger Reproduktionsmedizinische Praxis  
 Oldenburg: Dr med. Saif Jibril; Tagesklinik Oldenburg  
 Osnabrück: Kinderwunschzentrum Osnabrück  
 Pforzheim: Zentrum für Reproduktionsmedizin in der Centralklinik  
 Prien am Chiemsee: Priener Zentrum für Reproduktionsmedizin  
 Regensburg: Zentrum für Gynäkologische Endokrinologie und Reproduktionsmedizin  
 Remscheid: Gynäkologische Endokrinologie und Reproduktionsmedizin am Klinikum Remscheid  
 Rostock: Universitäts-Frauenklinik Rostock Reproduktionsmedizin  
 Saarbrücken: Dr med. Jens Happel/Dr med. Michael Thaele/Dr med. Lars Happel  
 Schwäbisch Gmünd: Klinikum Schwäbisch Gmünd Margareten Hospital  
 Schwerin: Medizinisches Zentrum der Landeshauptstadt Schwerin Klinikum Schwerin  
 Stralsund: Klinikum am Sund Frauenklinik IVF-Zentrum Stralsund  
 Stuttgart: Praxis Dr D.B.Mayer-Eichberger IVF-Zentrum  
 Tübingen: Universitätsklinikum Tübingen Frauenklinik Schwerpunkt Gynäkologische Endokrinologie und Reproduktionsmedizin  
 Ulm: IVF-Zentrum Ulm; Universitätsklinikum Ulm  
 Wiesbaden: Zentrum für Reproduktionsmedizin  
 Würzburg: Dr med. R.Mai/Dr med. Wolfgang Schmitt, medizinische Genetik; Universitäts-Frauenklinik Würzburg

### Greece

Athens: Institute of Gynaecology and Assisted Reproduction; Iatriki Erevna; Euromedica IVF; Fertility Institute; Embryogenesis  
 Ioannina: IVF Center of Ioannina,  
 Thessaloniki: Infertility and IVF Center, Geniki Kliniki; Intrabalkan Medical Center

### Hungary

Budapest: 1st Department of OB/GYN, Semmelweis University of Medicine; Department of OB/GYN, Jahn Ferenc Hospital; Department of OB/GYN, 'Nyiro Gyula' Hospital; Department of OB/GYN, St. John's Hospital  
 Debrecen: Department of OB/GYN, Medical University of Debrecen  
 Pécs: Department of OB/GYN, Medical University of Pécs  
 Tapolca: Pannon Institut for Reproduction

### Iceland

Reykjavik: IVF Unit, Department of OB/GYN, National University Hospital, Landspítali.

### Ireland

Dublin: Human Assisted Reproduction Ireland, Rotunda Hospital  
 Galway: Galway Fertility Clinic  
 Kildare: Clane Fertility Clinic

### Italy

Abano Terme (PD): Casa di Cura Abano Terme-Centro Ripr. Assistita  
 Ancona: Ospedale Salesi  
 Bari: Clinica S. Maria; Studio Medico 'San Luca'; Studio Associato CECOS; University of Bari  
 Bergamo: Ospedali Riuniti  
 Bologna: S.I.S.M.E.R.; Tecnobios  
 Bolzano: Ospedale di Bolzano  
 Bressanone (BZ): Ospedale di Bressanone  
 Brunico (BZ): Ospedale di Brunico  
 Cagliari: Ospedale Regionale Micocitemie  
 Campobasso: Villa Maria  
 Caserta: Centro Genesis  
 Catania: C.R.A.  
 Cittadella (PD): Ospedale di Cittadella  
 Fermo (AP): Istituto Palmatea  
 Firenze: Centro P.M.A. 'Futura Diagnostica'  
 Fossano (CN): Ospedale di Fossano  
 Genova: Biotech; Università di Genova  
 Gragnano (NA): A.O.G.O.I.  
 Lecce: Centro Studi Riproduzione Umana  
 Manduria (TA): Ospedale M.Giannuzzi  
 Mantova: Centro Medicina della Riproduzione Ospedale C.Poma  
 Mercogliano (AV): Diagnostica Medica  
 Messina: Centro di Riproduzione Umana  
 Mestre (VE): ARC-STER  
 Milano: Fondazione S. Raffaele del Monte Tabor; Polo Universitario S. Paolo; Centro Cerva  
 Modena: Università di Modena e Reggio Emilia  
 Monza (MI): Centro Medicina della Riproduzione 'Biogenesi'  
 Motta di Livenza (TV): Ospedale di Motta di Livenza  
 Napoli: Centro Mediterraneo di Fecondazione Assistita; Villa del Sole  
 Nardò (LE): Tecnomed-Centro Medico Biologico  
 Padova: Studio 'Gemma'; Euganea Medica  
 Palermo: Centro 'Andros'; Centro Biologia della Riproduzione; Centro Genesis  
 Parma: C.I.R. Università di Parma  
 Pesaro: Centro Salus  
 Pescara: Villa Serena  
 Pieve di Cadore (BL): Ospedale Civile  
 Pisa: Casa di Cura S. Rossore; Università di Pisa; CE.S.CO.  
 Pordenone: Ospedale S. M. degli Angeli  
 Reggio Emilia: Studio Diagnostico Raul Palmer  
 Rimini: Ospedale 'Infermi'  
 Roma: European Hospital; Centro 'Genesis'; Centro R.A.P.R.U.I.; Villa Margherita; Università 'La Sapienza'; C.I.P.A.; C.I.D.  
 Rozzano (MI): Istituto Clinico Humanitas  
 Salerno: C.M.R.; Human Fertilization Center  
 Sassari: Università di Sassari  
 Sora (FR): Centro S.T.S.  
 Torino: Laparoscopy and Fertility Center; Centro LIVET; Ospedale S. Anna; Centro Diagnosi e Cura dell'Infertilità di Coppia; Fertilab

Trecenta (RO): Ospedale S. Luca  
 Trieste: Ospedale Burlo Garofalo  
 Varese: Centro Diagnostico Varesino  
 Verona: Policlinico Borgoroma

### **The Netherlands**

Amsterdam: Academisch Medisch Centrum, Vrije Universiteit Medisch Centrum  
 Eindhoven: Catharina Ziekenhuis  
 Groningen: Academisch Ziekenhuis Groningen  
 Leiden: Leids Universitair Medisch Centrum, Stichting Medisch Centrum voor Geboorteregeling  
 Maastricht: Academisch Ziekenhuis Maastricht  
 Nijmegen: Universitair Medisch Centrum St Radboud  
 Rotterdam: Academisch Ziekenhuis Rotterdam  
 Tilburg: St. Elisabeth Ziekenhuis  
 Utrecht: Universitair Medisch Centrum  
 Voorburg: Reiner de Graaf Groep  
 Zwolle: Isala Klinieken

### **Norway**

Bergen: Kvinneklinikken Helse-Bergen  
 Haugesund: Haugesund sjukehus Helse Fonna  
 Oslo: Fertilitetssenteret Omnia på Røde Kors Klinikk;  
 Rikshospitalet; Ullevål Universitetssykehus; Volvat  
 Medisinske Senter  
 Trondheim: St Olavs Hospital HF  
 Tromsø: Universitetssykehuset i Nord-Norge HF

### **Poland**

Bialystok: Department of Gynecology, Medical Academy of Bialystok  
 Bialystok: Center for Reproductive Medicine 'Kriobank'  
 Bytom: I Katedra i Klinika Poloznictwa i Ginekologii  
 Lodz: 'Gameta' Fertility Center  
 Lublin: 'AB OVO', NZOZ Centrum Zdrowia Rodziny  
 Myslowice: 'Novomedica', Klinika Leczenia Nieplodnosci  
 Poznan: Division of Infertility and Reproductive Endocrinology  
 Poznan: Health Centre 'Intermedica', IVF Clinic  
 Szczecin: Clinic for Reproduction and Gynecology, Pomeranian Medical University  
 Warsaw: I Clinic of Obstetrics and Gynecology, University Medical School of Warsaw  
 Warsaw: Private Polyclinic 'Novum'  
 Warsaw: Private Gynaecological Clinic of Reproduction 'Germen'

### **Portugal**

Guimarães: Hospital N. S. da Oliveira  
 Lisboa: Ava Clinic; Centro de Medicina da Reprodução-Instituto de Urologia; CLIFER; Hospital de Santa Maria; Maternidade Dr Alfredo da Costa  
 Oporto: Centro de Genética Prof. Alberto Barros; CETI; Hospital de S. João; Maternidade Júlio Dinis  
 Vila Nova de Gaia: Centro Hospitalar

### **Russia**

Cheboksary: Republican Center for Family Planning and Reproduction, Ministry of Health Chuvashia Republic  
 Krasnoyarsk: Center for Reproductive Medicine  
 Moscow: Center 'Lera'; Center for Family Planning and Reproduction, IVF Department; Center for Infertility Treatment 'IVF'; IVF Department of Sechenov Medical Academia; Medical Center for ART; Medical Center for Infertility Treatment 'Embryon'; Scientific Center for Obstetrics, Gynecology and Perinatology of Russian Academy of Medical Science  
 Rostov-Don: Center of Human Reproduction and IVF  
 Samara: Medical Company 'IDK'  
 Saratov: Region Center for Family Planning and Reproduction  
 St Petersburg: Baltic Institute of Human Reproductology; Center for Family Planning, Pushkinsky District; International Center for Reproductive Medicine, Ob/Gyn Ott Institute; Russian Finnish Medical Center 'AVA-Peter'  
 Tumen: Center for Reproductive Medicine 'Mercury'; Medical Center 'Malish', Medical Director N.M.Kovalev  
 Vladivostok: Medical Center for IVF 'Santa Maria'  
 Voroneg: Region Center for Family Planning and Reproduction, IVF Department

### **Slovenia**

Ljubljana: Department of Obstetrics and Gynaecology, Medical Centre Ljubljana  
 Maribor: Department of Reproductive Medicine and Gynecologic Endocrinology, Hospital Maribor  
 Postojna: Centre for Infertility Treatment, Hospital Postojna

### **Spain**

List not available

### **Sweden**

Falun: Falu lasarett  
 Göteborg: Fertiliterstcentrum; Sahlgrenska sjukhuset  
 Huddinge: Huddinge sjukhus  
 Linköping: Universitetssjukhuset  
 Malmö: Curakliniken; Ideonkliniken  
 Örebro: Regionssjukhuset  
 Stockholm: Karolinska sjukhuset; Lucinakliniken; S:t Görans sjukhus; Sophiahemmet  
 Umeå: Norrlands universitetssjukhus  
 Uppsala: Akademiska sjukhuset, Carl von Linné kliniken

### **Switzerland**

Baden: Reproduktionsmedizinisches Zentrum Kantonsspital  
 Basel: IVF-ICSI Zenter Institut Dr Viollier, Dr N.Pavic, Dr J.-C.Spira; Universitäts-Frauenklinik, Abt. für gynäkologische Endokrinologie und Reproduktionsmedizin  
 Bellinzona: ProCrea, Centro Fertilità della Svizzera Italiana  
 Bern: Lindenhofspital, IVF-Labor; Universitätsfrauenklinik, Abt. für Gynäkologie, IVF und Reproduktionsmedizin, Inselspital  
 Frauenfeld-Kreuzlingen: IVF Zenter ILAMED

Genève: Centre Privé de Procréation Médicalement assistée de la Clinique de Champel Elysée; Hôpital Universitaire, Clinique et Polyclinique de Stérilité et d'Endocrinologie Gynécologique  
Lausanne: CHUV, Unité de Médecine de la Reproduction et d'Endocrinologie Gynécologique; Centre Vanderlick-Montchoisi

Locarno: Centro Cantonale di Infertilità, Servizio di Endocrinologia Ginecologica

Luzern: Kantonalspital, Sterilitätssprechstunde Frauenklinik, IVF-ICSI Labor

Schaffhausen-Zürich: Zentrum für Reproduktionsmedizin, Dr P.Fehr, Dr Singer

Winterthur: Dr R.Köppel

Zollikerberg: IVF Zürich

Zürich: Universitätsspital, Klinik für Endocrinologie

## UK

Aberdeen: University of Aberdeen

Aldridge: Midland Fertility Services

Basingstoke: The Hampshire Clinic

Bath: Bath Assisted Conception Clinic

Belfast: Regional Fertility Centre, Belfast

Birmingham: Birmingham Women's Hospital; BMI Priory Hospital

Bristol: Centre for Reproductive Medicine, University of Bristol; Southmead Hospital

Burton Upon Trent: Burton Hospitals NHS Trust

Cambridge: Bourn Hall Clinic

Cardiff: University Hospital of Wales

Chingford: Essex Fertility Centre

Colchester: Isis Fertility Centre

Coventry: Centre for Reproductive Medicine, Coventry

Darlington: Cromwell IVF and Fertility Centre, Darlington

Dorchester: The Winterbourne Hospital

Dundee: Ninewells Hospital

Eastbourne: Esperance Private Hospital

Edinburgh: Edinburgh Assisted Conception Unit

Exeter: Peninsular Centre for Reproductive Medicine

Gateshead: Centre for Assisted Reproduction, Gateshead

Glasgow: BMI Ross Hall Hospital; Glasgow Nuffield Hospital;

Glasgow Royal Infirmary

Great Missenden: The Chiltern Hospital Fertility Services Unit

Hartlepool: Hartlepool General Hospital

Hull: Hull IVF Unit

Ilford: The Bupa Roding Hospital

Kent: BMI The Chaucer Hospital

Leeds: Assisted Conception Unit, St James' University Hospital-Leeds; Clarendon Wing-Leeds

Leicester: BUPA Hospital Leicester; Leicester Royal Infirmary

Liverpool: Liverpool Women's Hospital; University Hospital Aintree

London: Assisted Conception Unit, King's College Hospital; Assisted Reproduction and Gynaecology Centre; Barts and the London Fertility Centre; Chelsea & Westminster Hospital; Cromwell IVF and Fertility Centre, London; Diana, Princess of Wales Centre for Reproductive Medicine; Guys Hospital; Homerton University Hospital NHS Trust; London Female and Male Fertility Centre; London Fertility Centre; London

Women's Clinic/Hallam Medical Centre; Newham General; The Bridge Centre; The Hammersmith Hospital; The Harley Street Fertility Centre; The Lister Fertility Clinic; The Portland Hospital Fertility Unit; UCH London

Manchester: CARE at the Alexandra Victoria Park; Manchester Fertility Services Ltd; St Mary's Hospital

Middlesborough: The James Cook University Hospital

Newcastle: Newcastle Fertility Centre at Life

Newcastle-under-Lyme: Lifestyle

Northampton: CARE at the Three Shires Hospital

Nottingham: CARE at the Park Hospital; NURTURE

Orpington: BMI Chelsfield Park ACU

Oxford: Oxford Fertility Unit

Plymouth: South West Centre for Reproductive Medicine

Salford: Salford Royal IVF and Fertility Centre

Sheffield: CARE at The Sheffield Fertility Centre

Slough: Willow Suite, Thames Valley Nuffield Hospital

Southampton: BUPA Hospital Southampton

Swansea: Cromwell IVF and Fertility Centre, Swansea

Wirral: Wirral Fertility Centre

Woking: The Woking Nuffield Hospital

Wolverhampton: Wolverhampton Assisted Conception Unit

## Ukraine

Donetsk: Donetsk Regional Centre for Maternity and Child Care; Isida-Don IVF

Kharkiv: Center for Reproductive Medicine 'Implant'

Kyiv: Institut Genetics Reproduction; Institute Reproduction Medicine; Isida IVF

Odessa: Center for Reproductive Medicine REMEDI

Simferopol: Regional Center for Family Planning and Human Reproduction

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