Cambridge University Press 978-1-107-64832-6 — How to Improve your ART Success Rates Edited by Gab Kovacs Index More Information

Index

Page numbers in *italics* denote a table those in **bold** a figure.

4D ultrasonography, see real-time 3D US acupuncture, 217 advantage, 219 embryo transfer, 218-219 and ET, 219 literature, published, 217 oocyte retrieval, 218 adalimumab, 204 adiponectin, 36 adipose tissue, 33 see also obesity adjuvant therapy, 213 hyperbaric oxygen therapy, 214 sildenafil citrate, 213 see also growth hormone AFC, see antral follicle counting AGA, see antigliadin antibodies alkylating agents, 226 see also chemotherapy American Fertility Society (AFS), see American Society for Reproductive Medicine American Society for Reproductive Medicine (ASRM), 51 AMH, see anti-Müllerian hormone ANA, see antinuclear antibodies analytical studies, 242 see also observational studies aneuploidy DHEA effectiveness, 93 ET prevention, 153, 154 and meiosis errors, 153 pregnancy outcome, 154 prevalence effect, 153 anovulation, 1 see also ovulation induction; superovulation antigliadin antibodies (AGA), 25 anti-Müllerian hormone (AMH), 1, 7, 8 advantage of, 8

age-specific normal ranges, 95, 95 ovarian response assessment, 5 undetectable levels, 96 see also follicle stimulating hormone antinuclear antibodies (ANA), 24 antiovarian antibodies (AOA), 25 antioxidant enzymes, 128 antiphospholipid (aPL) heparin against, 184, 185 and IVF, 188, 189 IVF outcomes, 187 pregnancy loss, 185 antiphospholipid antibodies (APA), 22-24 antisperm antibodies (ASA), 25 antithyroid antibodies (ATA), 24 antral follicle counting (AFC), 7 concordance of, 8 "multi-planar" method, 8 OHSS risk prediction, 9 PR prediction, 8 predictive value of, 8 antral follicles, 115 AMH production, 2 see also antral follicle counting; follicle; in vitro maturation AOA, see antiovarian antibodies APA, see antiphospholipid antibodies 'apple' shaped body, 33 ART success measure, 235, 236-237 congenital anomalies, 239 CPR, 238 demographic factors, 237-238 primary measure, 238-239 success rate, 235 ART, see assisted reproductive technology ASA, see antisperm antibodies

in glucocorticoid therapy, 202 heparin-aspirin treatment, 187 and implantation rate, 186 in IVF prospective trials, 188 see also heparin ASRM, see American Society for Reproductive Medicine assisted hatching (AH), 156, 157, 159 glucocorticoids in, 201 methods, 157-158 pregnancy outcomes, 158-159 assisted reproductive technology (ART), 235 perinatal outcomes, 38, 236 pregnancy loss rate, 116 risks and complications, 238 standardized terminology, 236 see also ART success measure ATA, see antithyroid antibodies auto-antibodies, IVF patients, 23 autoimmunity, 22 thyroid dysfunction, 24 treatment in DOR patients, 96 bariatric surgery, 34 see also obesity bias, 244 patient allocation, 244 publication, 248 risks, 248, 249 selection, 236 see also confounding black diamond, 250-251 blastocyst transfer advantages, 139, 140 clinical application, 140 see also embryo transfer blastocysts, high quality, 145 blood NK cells, 29 analysis, 29-30 discriminating factors, 30 reproductive failure, 30

aspirin, 185

see also natural killer cells;

uterine NK cells

Cambridge University Press 978-1-107-64832-6 — How to Improve your ART Success Rates Edited by Gab Kovacs Index More Information

	Index	255
l		

see also ovarian

bNK cells, see blood NK cells body fat scarcity effect, 33 breastfeeding and iodine supplementation, 39 cabergoline, 112 see also quinagolide cancer in young women, 226, 228 ovarian stimulation effects on, 229 treatment and fertility, 227 see also chemotherapy; radiotherapy case-control study, 243 see also observational studies; study design cause-and-effect reversal, 241 celiac disease, 25 cervical dilatation, 161, 166 cervical factor subfertility, 64 chanelling bias, 244 chemical assisted hatching, 157 chemotherapy alkylating agents, 226 endocrinological responses to, 227 fertility preservation options, 228 GnRH analogues, 232 toxic effects, 226 see also radiotherapy Chinese Herbal Medicine (CHM), 209 as adjunct to ART, 210 clinical studies, 210 Cochrane Systematic Review, 209-210 functions, 209 patient, communication with, 209 psychological outcomes, 211 safety issues, 211 studies and confounding factors, 211 see also complementary medicines; Traditional Chinese Medicine CHM, see Chinese Herbal Medicine clinical pregnancy rate (CPR), 45-48, 116, 238 autologous fresh cycles, 237

hyperstimulation syndrome; live birth rate CM, see complementary medicines coasting, 110-111, 121 Cochrane Review, 247 CHM, 209-210 combined OCP pre-treatment, 89-90 considerations, 247 heterogeneity, 250 hormonal pre-treatment, 88 included studies, 248-250, 252 objective, 248 OHSS prevention, 111 precision of, 251 result, 250-251 r-hLH, 101 risk of bias, 248-250 validity of, 247-250 COH, see controlled ovarian hyperstimulation cohort studies, 243 retrospective, 244 complementary medicines (CM), 208 CHM, 209 pregnancy and LBR, 210 sources, 208 TCM, 208 conception, natural and AMH, 2 thyroxine replacement and, 3 confounding, 243 factors in CHM, 211 patient allocation, 244 congenital anomalies, 239 see also disability controlled ovarian hyperstimulation (COH), 1 Cochrane review, 88 limitations, 115 long down-regulation, 88 OCP, 87, 90 on tumours, 229 oocyte collection, 2, 87 PDR, 87 poor response to, 7 see also oral contraceptive pill; ovarian stimulation controlled ovarian superovulation, 147 corifollitropin alfa, 68, 77, 84 see also follicle stimulating hormone;

gonadotrophins; recombinant FSH corpus luteum, 190 endometrial development, 190 hCG on, 195 progesterone, 194 see also luteal phase supplementation corticosteroid in IVF, 199 treatment outcomes, 200 CPR, see clinical pregnancy rate cross-sectional studies, 243 see also study design cryopreservation embryo, 229, 237 oocytes, 229 ovarian tissue, 230 dehydroepiandrosterone (DHEA), 93 experimental use, 94 and ovarian aging, 97 supplementation, 93, 97 treatment outcomes, 96 treatment protocol, 96 delivery rate, 238 desensitization, 68 DET, see double embryo transfer, 248 DFI, see DNA Fragmentation Index DHEA, see dehydroepiandrosterone difficult embryo transfer, 168 diminished ovarian reserve (DOR), 93 diagnosis, 94-96 see also dehydroepiandrosterone disability, 235, 239 DNA Fragmentation Index (DFI), 130 Doppler study OHSS risk prediction, 9 DOR, see diminished ovarian reserve double embryo transfer (DET), 248 cost. 253 multiple pregnancy rate, 253 vs. SET, 250, 251 double lumen soft catheters, 175 down regulation, see desensitization

Cambridge University Press 978-1-107-64832-6 — How to Improve your ART Success Rates Edited by Gab Kovacs Index <u>More Information</u>

Index

256

E2, see oestrogen EC, see embryo cryopreservation echodense catheters, 176 EFI, see endometriosis fertility index embryo assessment criteria, 148 embryo cryopreservation (EC), 118, 229 cost of, 253 success rate, 237 see also oocyte freezing embryo culture media assessment, 148, 149, 151 embryo implantation factors affecting, 173 luteal E2 supplementation for, 192 embryo transfer (ET), 162, 164, 165, 173 bed rest after, 178-179 catheter factors in, 165-167, 170, 174, 175 clinical touch technique, 162 difficult, 168-169 dummy, 165 "easy", 161 embryo placement position, 162 heparin as prophylaxis, 187 intercourse effect, 181-182 mobility after, 180 optimal placement, 168, 170 preparation, 161-162, 169 sagittal view, 171 ultrasound guided, 162-164, 175 see also blastocyst transfer embryo transfer catheter, 173 flexibility & rigidity, 174-175 types, 174, 174 "embryo viability score", 149 embryonic development ICSI impact on, 136 nutrients for early, 144 endometrial biopsy, 29 endometrin vaginal tablets, 195 endometrioma cyst wall excision, 55 laparoscopic excision, 55 surgical removal issue, 54 endometriosis, 52 fecundity rates, 52 IUI effect, 52 and IVF, 54 ovarian suppression, 52

pre-treatment effect, 54-55 staging, 51 surgery in, 52 symptoms and diagnosis, 51 endometriosis fertility index (EFI), 73 surgery form, 53 endometrium, 29 adjuvant therapy, 213 E2 impact on, 190 factors affecting, 16 hyperbaric oxygen therapy, 215 progesterone, 194 sildenafil citrate, 213 thickness and IVF success, 213 epidermal growth factor (EGF), 144 **Experiential Psychosocial** Therapy, 223 see also infertility counseling experimental studies, 242 advantages, 242 see also observational studies F/SPDR, see flexi-short pill downregulation fertility fibroid effect on, 17-18 gynaecological conditions affecting, 209 nutritional deficiency and sperm DNA damage impact, 35 preservation options, 228 see also infertility; in vitro fertilisation fertility preservation, 71, 118, 228 desicion-making, 233 embryo freezing, 229 GnRH analogues, 231-232 oocyte freezing, 230 ovarian tissue preservation, 230 - 231selection, 232-233 FET, see frozen-embryo transfer fibroid, 16-18 on fertility, 19-20 medical management, 18 surgical management, 18-19 treatment options, 19, 20 UAE, 19 see also polyp flare-up effect, 81

flexi-short pill downregulation (F/SPDR), 90 folic acid, 38-39 follicle dominant, 68 recruitment, 67-68 follicle stimulating hormone (FSH), 121 age-specific normal ranges, 95 dosing normograms, 69-70 exogenous, 68 follicle recruitment, 67-68 fusion FSH molecule, 68 hyporesponders, 102 levels in menstrual cycle, 100 in ovarian stimulation, 84 poor responders to, 102 serum, 232 treatment and LH supplementation, 102 see also anti-Müllerian hormone frozen-embryo transfer (FET), 76 GH, see growth hormone ghrelin, 105 see also growth hormone glucocorticoids against autoantibodies, 200-201 in IVF patients with AH, 201 for ovarian response, 201 risks, 202 GM-CSF, see granulocyte macrophage colonystimulating-factor GnRH agonist, see gonadotropin releasing hormone agonist GnRH analogues, see gonadotropin releasing hormone analogues GnRHa, see gonadotropin releasing hormone analogues gonadotropin OHSS risk, 121 ovarian stimulation protocol, 123 stimulation effects, 117 stimulation protocol, 122 gonadotropin releasing hormone (GnRH) agonist, 122-123

gonadotropin releasing

Cambridge University Press 978-1-107-64832-6 — How to Improve your ART Success Rates Edited by Gab Kovacs Index <u>More Information</u>

Index	257

primary efficacy endpoint, 75

hormone agonist (GnRH agonist), 71, 121, 231 advantages and disadvantages, 81 E2, 191, 192 E2 and P4, 190 hCG administration, 84 IVF stimulation, 68, 70, 71 LH levels, 100 LH suppression, 67, 190 as LPS, 196-197 OHSS prevention, 112 ovarian stimulation, 80, 81 P4 pre-treatment, 91 **PCOS**, 73 r-hFSH stimulation, 102 thickened baseline endometrial stripe, 124 gonadotropin releasing hormone analogues (GnRH analogues), 80, 231 comparison, 81 fibroid reduction, 18 LBR, 82 limitations, 232 as ovarian protectors 232 protective effect, 231-232 secondary outcomes, 82 gonadotropin releasing hormone antagonist (GnRH antagonist), 82, 124, 231 advantages, 88 cycle scheduling, 85 disadvantage, 71 E2 and P4, 191, 192 E2, 91, 190 HP-HMG vs. rFSH in, 77 IVF stimulation, 71 LH phase, 100 for normal responders OHSS, 48, 83, 84, 110, 113 ovarian stimulation, 80-81 pituitary suppression, 194 gonadotropins, 75 in antagonist protocols, 77 corifollitropin alfa, 77 cost effectiveness, 76 exogenous, 99 hMG vs. rFSH, 76 in IVF practice, 69 for male subfertility, 77-78 in ovulation induction, 69, 75-76 poor responders, 77

recombinant FSH, 75 urinary, 68 granulocyte macrophage colony-stimulating-factor (GM-CSF), 144, 145 granulosa cell, 106 growth factor, 144 effects on embryo, 146 embryonic derived, 144 in preimplantation culture medium, 144 ligands and receptors expression, 144 growth hormone (GH), 105 factors affecting, 105 follicular fluid concentrations, 106 IGF-1, 105-106 in IVF, 106, 107, 107 LIGHT study, 108 physiological effects, 105 secretion, 105 systematic review, 106 see also adjuvant therapy haematological malignancy, 226 hCG, see human chorionic gonadotropins healthy baby, 236 heparin, 184 before cycle initiation, 186 function, 188 implantation failure reduction, 184 pregnancy outcome improvement, 184 unfractionated vs. low molecular weight, 185 hGH, see human GH HH, see hypogonadotropic hypogonadism high quality blastocysts, 145 hMG, see human menopausal gonadotropins HN, see hyaluronan 'hope narrative', 221 HSA, see human serum albumin human chorionic gonadotropins (hCG), 83 disadvantage, 112 dose and OHSS, 112 egg donor cycles, 71 half-life, 112 injection in IVF, 125

OHSS prevention, 110 ovarian hyperstimulation syndrome, 190 see also luteal phase supplementation; gonadotropin releasing hormone analogues human embryo complex albumin effects on, 145 culture, 139 culture media, 145 gradient nutrient supply, 139 growth factor ligands and receptors in, 144 HSA for, 143 insulin, 145 metabolism assessment, 148 morphology and viability score, 149 optimal transfer day, 140, 141 preimplantation, 22 SET, 140-141 somatic cell co-culture, 143 viability through oocyte donor model, 141 see also zona pellucida human GH (hGH), 106 administration and drug dosing, 107 see also growth hormone human menopausal gonadotropins (hMG), 75 cost effectiveness, 76 idiopathic male infertility treatment, 77 vs. r-FSH, 76 see also gonadotropins human serum albumin (HSA) in blastocyst culture media, 145 for human embryo, 143 Humira, 205 hyaluronan (HN), 145 hydrosalpinges antibiotic treatment, 58 effects on IVF, 57 fluid aspiration, 59 reconstructive surgery for, 57-58 salpingectomy, 58 salpingostomy, 59 surgical efficacy, 59-61, 61 tubal occlusion, 59 hydrosalpinx fluid, 57 aspiration, 59

Cambridge University Press 978-1-107-64832-6 - How to Improve your ART Success Rates Edited by Gab Kovacs Index More Information

258

hyperbaric oxygen therapy, 214 endometrial development within IVF, 215 randomized blinded trial, 215 and sildenafil, 215 see also adjuvant therapy hyperinsulinaemia, 43, 44 hyperthyroidism, 3 hypogonadotropic hypogonadism (HH), 99 LH role in, 100 hypothyroidism on IVF, 3 hysteroscopic pre IVF evaluation, 11-13 hysteroscopy, 20 ICSI, see intracytoplasmic sperm injection IGFBP-1, see insulin-like growth factor binding protein-1 IGF-1, see insulin-like growth factor-1 immune suppressant, see intravenous immunoglobulin immune therapy for IVF, 31 "immunological priming", 182 implantation, 22 causes for failure, 204 prediction, 150 thrombophilia effect, 26 see also corpus luteum implantation rate (IR) corticosteroid treatment on, 200 of cryopreserved embryo, 229 E2 and P4 impact, 191 in vitro fertilization (IVF), 7, 57, 115, 126 adiponectin, 36 AMH and TSH/FT4 measurement, 5 AMH marker, 1 AMH pregnancy outcome prediction, 3 and aspirin, 188, 189 auto-antibodies of IVF patients, 23 blastocyst transfer advantages, 139, 140 corticosteroid, 199 counselling impact on, 224 and distress, 222-223 dopamine effect, 5 educational interventions, 224

embryo pre-selection, 152, 153 embryo viability, 141 embryonic growth factors in, 144 emotional reactions, 221-222 endometriosis, 54 ET, 139, 173 failure, 217 fibroid impact, 19-20 follicle growth and hormonal level monitoring, 124-125 hCG injection, 125-126 and hormone assessment, 1 Humira and IVIG, 205, 206 and hypothyroidism, 4 immune therapy, 31 immunologic factors and, 186 implantation failure, 204 LPS effect, 194 outcomes and aPL, 187 overweight and obesity impact, 36 PCOS, 43 PGD benefits, 155 pharmocologic effects on, 187-189 pre evaluation, 11-14, 124 and prolactin levels, 4 psychological counseling, 223-224 psychological perspectives, 221 psychological stress on, 222 SET, 140-141 studies on, 206 success rate reporting, 236 T-helper cell balance, 204-205 thyroid function testing, 3 see also embryo transfer; hydrosalpinges; intrauterine insemination; in vitro maturation: ovarian stimulation, 308 in vitro maturation (IVM), 115, 118 advantages, 116-118 obstetric outcomes, 116 pregnancy loss rate, 116 see also in vitro fertilisation index case bias, 244 infertility AOA associated with, 25 bNK cell activity, 30 celiac disease, 25 counselling, 223 idiopathic male, 77-78

nutritional factors, 41 psychogenic model, 222 thyroid autoimmunity, 24 treatment, 75 see also fertility; intrauterine insemination; in vitro fertilization insulin, 145 resistance, 43, 44 sensitizing agents, 44 insulin-like growth factor binding protein-1 (IGFBP-1), 43 insulin-like growth factor-I (IGF-I), 105-106, 145 intracytoplasmic morphologically-selected sperm injection (IMSI), 135 intracytoplasmic sperm injection (ICSI), 133, 137, 243 cost of, 136-137 fertilization rate, 134 in non-male factor, 134 need for, 127, 134, 136 "poor" semen analysis and, 135 risks in, 135-136 intramural (IM) fibroid, 17 myomectomy, 18 intramuscular (IM) progesterone, 194 OHSS risk, 196 intrauterine insemination (IUI), 63 age and, 65 as first line treatment, 65 cost, 65 effectiveness of, 63 factors affecting, 66 risks, 64-65 subfertility factors, 64 see also in vitro fertilization intravenous immunoglobulin (IVIG), 204 studies on, 205 iodine, 39 IUI, see intrauterine insemination IVF stimulation protocols, 68 corifollitropin alfa, 68 FSH dose, 69-70 GnRH analogues, 71 gonadotrophin choice, 68 hCG, 71 milder stimulation regimens, 70

Cambridge University Press 978-1-107-64832-6 — How to Improve your ART Success Rates Edited by Gab Kovacs Index <u>More Information</u>

Index 259

PCOS, 73 pituitary suppression, 68 for specific indications, 71-73 stimulation initiation, 70 IVF, see in vitro fertilization IVF/ICSI "splits", 134 IVIG, see intravenous immunoglobulin IVM, see in vitro maturation, 115 laparoscopic pre IVF evaluation, 13-14 laser assisted hatching, 157 LBR, see live birth rate leiomyomata, see fibroid leukocyte ROS generation, 128 LH, see luteinizing hormone LIGHT study, see Livebirth, In vitro fertilisation and Growth Hormone Treatment study live birth rate (LBR), 45, 238 IUI uses, 45, 64 see also clinical pregnancy rate; ovarian hyperstimulation syndrome Livebirth, In vitro fertilisation and Growth Hormone Treatment study (LIGHT study), 108 local thinning, 156 long protocol, 71 LPS, see luteal phase support luteal phase supplementation, 190 luteal phase support (LPS), 194 E2 and P4, 196 P4 vs. hCG, 195-196 timing of, 197 luteinizing hormone (LH), 99 beneficial effect, 99 ceiling, 100 FSH and ovarian response, 102 role in HH, 100 supplementation, 100, 102 surge prevention, 194 systematic review and metaanalysis, 101 threshold, 100 see also gonadotropin releasing hormone agonist

major histocompatibility complex (MHC), 28 Malecot catheter, 169 maximal implantation potential point (MIP point), 170, 171 metabolomics, 149-150 metformin, 44, 113-114 as adjunct to IVF, 46, 48, 49 for CPR, 45-48 in IVF, 44 for LBR, 45 for OHSS, 48 RCTs, 45 uses, 44, 48-49 MHC, see major histocompatibility complex MIP point, see maximal implantation potential point multiple gestation risk, 147 myomectomy abdominal, 19 for IM and SM fibroid, 18 see also polypectomy narrative studies, 242 see also observational studies National Institute of Clinical Excellence, UK, (NICE), 179 natural killer cells (NK cells), 28, 31, 194 assessment methods, 29 elevated peripheral blood, 204 neural tube defect (NTD), 38 NICE, see National Institute of Clinical Excellence, UK nitric oxide, 213 NK cells, see natural killer cells NTD, see neural tube defect obesity ART success rate, 33 effect, 36 lifestyle intervention, 34

lifestyle intervention, 34 orlistat, 34 pregnancy rate, 36 sibutramine, 34 observational studies, 241–242 narrative, 242 occult primary ovarian insufficiency (OPOI), 93 see also diminished ovarian reserve OCP, see oral contraceptive pill

odds ratios (ORs), 116, 163 oestrogen

deprivation symptoms, 81 oestrogen (E2), 190 and P4 in IVF cycles, 191-192 for implantation, 190-191, 192 in follicular phase, 190 OHSS, see ovarian hyperstimulation syndrome oocvte aged, 97 aneuploid, 152 DHEA effectiveness, 93 donation and IVM, 117 proction and AMH, 3 quality, 2 retrieval, 118, 187 semen exposure and pregnancy rate, 181-182 survival on freezing, 229 oocyte freezing, 230 and ovarian tissue freezing, 231 oocyte utilization rate, 230 see also embryo cryopreservation OPOI, see occult primary ovarian insufficiency oral anti oestrogens, 67 oral contraceptive pill (OCP), 87 advantages, 88 and down-regulation protocol, 88 F/SPDR, 90 microdose flare protocol, 123 pre-treatment, 88-90, 90, 91 ultrashort pill-down regulation, 90 oral progesterone, 195 orlistat, 34 ORs, see odds ratios ovarian aging, 97 blood flow, 9 cyst management, 124 hyperstimulation, 4, 72 response improvement, 201 suppression, 52 tissue freezing, 230-231, 231 volume, 8 ovarian failure after cancer treatment, 228 indicator, 228 risk factors, 226 ovarian hyperstimulation syndrome (OHSS), 44, 48, 82, 110

Cambridge University Press 978-1-107-64832-6 — How to Improve your ART Success Rates Edited by Gab Kovacs Index <u>More Information</u>

1

ovarian (cont.)

AMH and, 2

Index

260

coasting, 110-111 COH risk, 115, 117 dopamine agonist, 112-113 GnRH analogue, 83, 84, 110, 112, 113 gonadotropin, 3, 69, 121 hCG, 83, 110, 111-112 intravenous albumin, 111 luteal phase supplementation risk, 190 metformin, 113-114 patients at risk, 110 prediction of, 9 prevention, 110 rLH, 83 see also clinical pregnancy rate; live birth rate; ovarian stimulation ovarian reserve (OR) and AMH, 2, 121 assessment, 1-3, 7, 232 gonadotropin stimulation, 2 hormones used, 1 treatment, 73 see also diminished ovarian reserve ovarian stimulation corifollitropin alfa, 84 effects of, 116-117 FSH in, 84 in good responder, 121-124 monitoring, 120 protocol, 80, 81, 120-121 risk factors, 110 see also ovarian hyperstimulation syndrome ovary, 43 ovulation induction, 43, 75-76 P4, see progesterone parallel randomized trial, 245 "Parent's-kiss-technique", 241 Parkinson's disease, 241 patient safety, 235 PB, see polar body PCO, see polycystic ovaries

PCOS, *see* polycystic ovarian syndrome PDR, *see* Pill-Down-regulation 'pear' shaped body, 33 percutaneous testicular sperm aspiration, 115 perinatal morbidity markers, 238 PGD, see preimplantation genetic diagnosis Pill-Down-regulation (PDR), 87 POA, 93 see premature ovarian aging polar body (PB), 152 polycystic ovarian syndrome (PCOS), 2, 43, 73 anovulatory subfertility, 43-44 diagnostic criteria, 43 in IVM patients, 116 metformin, 44-45 "therapeutic window", 3 polycystic ovaries (PCO), 116 polyp, 20 endometrial, 20 treatment, 20 see also fibroid polypectomy, 20 hysteroscopic, 20, 21 see also myomectomy poor response (PR), 7 prediction, 8 PR, see poor response; pregnancy rate pregnancy adverse effects of multiple, 253 aneuploid embryos, 154 APA involvement, 23 folic acid supplementation, 38 - 39implantation, 22 iodine supplementation, 39 iron-folate supplementation, 40 morbidity in, 23 natural supplements, 41 nutrition, 38 nutritional deficiency impact, 35, 36 sperm DNA damage, 35 vitamin supplementation, 39-40 after weight loss, 35 pregnancy loss AGA, 25 ANA, 24 AOA, 25 APA, 22–24 aPL-associated, 185 ASA, 25 ATA, 24 heparin-aspirin treatment, 187 pregnancy loss rate ICSI, 116 IVF, 116

IVM, 116 pregnancy rate (PR) AH, 158, 159 analysis, 101 corticosteroid treatment on, 200 DHEA effectiveness, 93 E2-P4 vs. P4, 191 EFI. 52 IUI with ovarian stimulation, 52 IVF, 120 IVM, 116 see also corpus luteum preimplantation genetic diagnosis (PGD), 152 chromosomal abnormality detection, 152-153 controversy in, 152, 153 limitation, 154 on reproductive outcome, 153-155 premature ovarian aging (POA), 93 see also diminished ovarian reserve primary ovarian failure (POF), 9 progesterone (P4), 190, 194 vs. hCG in LPS, 195-196 as LPS, 197 route of administration, 194-195 prolactin, 4 pseudorandomization, see quasirandomization psychosocial counsellor, 223 publication bias, 244 quality treatment, 235 quasirandomization, 245 quinagolide, 112-113 see also cabergoline radiotherapy side effects, 227 see also chemotherapy randomized clinical trials (RCTs), 209 issues involved, 244 randomized controlled trials (RCTs), 242-243 Cochrane Review, 248

Cochrane Review, 248 for endometriosis, 52 hydrosalpinges treatment comparisons, 59–61 key concepts, 244

Cambridge University Press 978-1-107-64832-6 — How to Improve your ART Success Rates Edited by Gab Kovacs Index <u>More Information</u>

|--|

244 resources, 245-246 RCTs, see randomized clinical trials; randomized controlled trials reactive oxygen species (ROS), 128 real-time 3D US, 163 recall bias, 244 receiver operating characteristic (ROC) analysis, 30 receiving operator characteristic (ROC) PR prediction, 8 recombinant FSH (rFSH) cost per IVF, 76 vs. hMG, 76 idiopathic male infertility treatment, 77 see also corifollitropin alfa; gonadotropins recombinant human LH (r-hLH) advantages, 100 Cochrane review, 101 r-hFSH stimulation, 102 recombinant LH (rLH), 83 reproductive failure, 36 reproductive treatment, in vitro fertlization retrospective cohort studies, 244 rFSH, see recombinant FSH r-hLH, see recombinant human LH rLH, see recombinant LH ROC, see receiver operating characteristic; receiving operator characteristic Rocket transfer catheter, 176 ROS, see reactive oxygen species salpingectomy, 58 see also tubal occlusion salpingostomy, 59 selection bias, 248

randomization procedures,

seminal plasma, 128 SET, *see* single embryo transfer sibutramine, 34 sildenafil citrate, 213 function, 213 studies on, 213–214 *see also* adjuvant therapy single embryo transfer (SET), 147 vs. DET, 250, 251 implementing, 147 multiple pregnancy rate, 253 SMGT, see sperm-mediated gene transfer, ICSI-based somatic cell co-culture, 143 somatomedin C, see insulin-like growth factor-I sonosalpingography, 9 sperm antioxidant protection for, 128 assessment package, 137 DNA damage, 35, 136 embryonic development factors, 128-129 fertility, 131 induced Ca²⁺ oscillations, 136 intact DNA significance, 129 - 130isolation principle, 127-128 leukocyte contamination, 128 preparation, 135 selection for ICSI, 135 separation, 127, 130-131, 131 vulnerability, 127 washing for IUI, 63 sperm-mediated gene transfer, ICSI-based (SMGT), 136 standard "co-flare" protocol, 124 stress cyclical model, 222 response, 4 stromal blood flow as predictor, 9 study design case-control, 243 cross-sectional, 243 hierarchy, 242, 242 subfertility cervical factor, 64 male factor, 64 unexplained, 64 see also fertility; infertility submucosal (SM) fibroid, 16, 17 myomectomy, 18 subserosal (SS) fibroid, 17 success, 235 rate, 235, 237 superovulation, 70 protocols, 67 requirements, 69 see also IVF stimulation protocols; ovarian stimulation "super-stabilized" chromatin, 136 surveillance bias, 244 survival rate embryo freezing, 229 oocyte freezing, 229 'take home baby rate', 156 TCM, see Traditional Chinese Medicine Teratozoospermia Index (TZI), 135 thrombophilia, 25-26 acquired and inherited, 26 thyroid dysfunction assessment, 3-4 TIFF, see Total IVF Fertilization Failure "tolerant" immune response, 182 **Total IVF Fertilization Failure** (TIFF), 134 Towako method, see transmyometrial transfer Traditional Chinese Medicine (TCM), 208-209 acupuncture, 217 see also complementary medicines 'transfer less' approach, 117 transforming growth factor alpha (TGF-a), 144 transmyometrial transfer, 169 transvaginal ultrasound, 163 traumatic embryo transfer, 161 treatment success, see success trial embryo transfer, 169 'trohoc' studies, see retrospective cohort studies trophoblastic invasion defect, 185 tubal infertility, 57 reconstructive surgery for, 57 - 58two step approach, 58 tubal occlusion, 59 see also salpingectomy; salpingostomy 'two cell - two gonadotrophin' model, 99-100 TZI, see Teratozoospermia Index ultrasonography, 9 ultrasound (U/S) endometrial receptivity, 9 OHSS risk prediction, 9 uterine and tubo-peritoneal lesion detection, 10

Cambridge University Press 978-1-107-64832-6 — How to Improve your ART Success Rates Edited by Gab Kovacs Index More Information

More information

262	Index				
-----	-------	--	--	--	--

ultrasound (U/S) guidance, 162 advantage, 163 and catheter position, 170 vs. clinical touch ET, 163-164 disadvantage, 163 ET, 175 transvaginal aspiration, 64 uNK cells, see uterine NK cells urinary gonadotrophins, 68 U/S, see ultrasound uterine implantation failure, 204 tubo-peritoneal lesion detection, 10 uterine artery embolization (UAE), 19

uterine cavity assessment, 16 leakage prevention, 58, 59 SM fibroid effects, 17 uterine NK cells, 28 apoptosis, 28 assessment, 29 reproductive failure, 30

vaginal progesterone gel, 195 vaginal progesterone suppositories, 195 vascular endothelial growth factor (VEGF), 112 vascular thrombosis, 23 VEGF, see vascular endothelial growth factor verification bias, 244 vitamin B9, see folic acid vitamin supplementation, 39–40

women, young cancers in, 226 counseling before treatment, 233

zona pellucida, 156 dissection, 157 distension, 158 manipulation site, 158