

Density Gradient Centrifugation Method (DGC)							SwimCount™ Harvester Method						Differences DGC vs. SwimCount™ Harvester				
No. of steps performing the DGC (Density Gradient Centrifugation)	Description of each step and activity	No. of Seconds	Description and special mentioning of the steps where a Transfer of the Sample takes place	Risk Factor from 1-5 (5 being most difficult)	Weight in %	Weighted Value	No. of steps performing the SwimCount™ Harvester	Description of each step and activity	No. of Seconds	Description and special mentioning of the steps where a Transfer of the Sample takes place (none for the SwimCount™ Harvester)	Risk Factor from 1-5 (5 being most difficult)	Weight in %	Weighted Value	No. of Seconds-difference between DGC and SwimCount™ Harvester in %	No. of Minutes-difference between DGC and SwimCount™ Harvester	Risk Factor between DGC and SwimCount™ Harvester in %	Risk Factor between DGC and SwimCount™ Harvester in times
1	Preparation of gradient culture medium	20	The two layers of gradient medium (40 and 80) are carefully layered on top of each other	1	1%	0,01	1	Inject sperm sample into the device	20	1 mL sample is transferred to the SwimCount™ Harvester	1	25%	0,25				
2	Carefully dispense up to 2 mL of liquefied semen sample on top of the prepared gradient	1200	Care may be taken not to overload the gradient as this may result in a poor sperm yield	4	1%	0,04	2	Add sperm preparation medium into the device	20	0.8 mL Sperm Preparation Medium is transferred to the SwimCount™ Harvester	1	25%	0,25				
3	The gradient is centrifuged at 300 x g to 400 x g for 15-20 Minutes	20		1	1%	0,01	3	30 Minutes Incubation time	1800		1	25%	0,25				
4	Remove the supernatant from the pellet	20		1	1%	0,01	4	Aspirate 0.8 mL of the purified semen sample from the device	20	Aspirate the Progressive Motile Sperm Cells and transfer to XX	1	25%	0,25				
5	Transfer the pellet with a new sterile tip into a clean conical centrifuge test tube containing 3-5 mL of sperm wash medium	20	Attention make sure test tubes are labelled correctly when trasfering material between different test tubes	5	30%	1,50											
6	Mixing	20		2	2%	0,04											
7	Centrifuge at 200 x g to 300 x g for 5-10 Minutes	600		3	5%	0,15											
8	Aspirate and remove most of the supernatant.	20		2	1%	0,02											
9	Transfer the pellet with a new sterile tip into a clean conical centrifuge test tube containing 3-5 mL of sperm wash medium	20	Attention make sure test tubes are labelled correctly when trasfering material between different test tubes	3	25%	0,75											
10	Mixing	20		3	1%	0,03											
11	Centrifuge at 200 x g to 300 x g for 5-10 Minutes	600		1	1%	0,01											
12	Aspirate and remove most of the supernatant	20		2	1%	0,02											
13	Resuspend	20	Attention make sure test tubes are labelled correctly when trasfering material between different test tubes	5	30%	1,50											
Total Number of Steps		13					Total Number of Steps		4								
Total Amount of Seconds		2600					Total Amount of Seconds		1860								
Total Amount in Minutes		43					Total Amount in Minutes		31					40%	12		
Total Numerical Risk Value				33			Total Numerical Risk Value				4					725%	8
Total Weigh in % of each Step (Check)					100%		Total Weigh in % of each Step (Check)					100%					
Weighted Risk Factor						4	Weighted Risk Factor						1			309%	4