

APPLICATION FORM

Compan	у					
Vame	Università degli Studi di Foggia	P.Iva	C.F. 94045260711			
Address	via Antonio Gramsci, 89/91		City	Foggia (FG)		
ip	71122		Region	Puglia		
el	+39.0881338533		E-mail	giosiana.santoro@unifg.it		
			web	www.unifg	g.it	
mployee	More than 499 employees	Turnover	Less than 25	50.000 Euro	Export	Less than 75.000 Euro
apresentative	Giosiana Linda Dalma Santoro Servizio Terza Missione e Parte	`	Responsabile			

Proposal				
Title	Italian Title: Uso di anticorpi contro la proteina PLAC1 come biomarcatori di infertilità, kit diagnostico per la rilevazione della risposta immunitaria contro PLAC1 e uso della proteina PLAC1 in campo terapeutico e contraccettivo English Title: Use of anti-plac1protein antibodies as biomarkers of infertility			
Sector	BIOTECHNOLOGY			
IP protection level	Inventors: Prof. Arcangelo Liso and Prof. Maria Matteo Applicant: Università degli Studi di Foggia Italian Patent: Identification number: ITRM20100386 (A1) on 2012-01-15; IT1401197 (B1) on 2013-07-12 European patent: Identification number: 2593789 EU granted patent on 29 April 2015 (France, Germany, Spain, United Kingdom, Monaco).			
Description	The invention concerns the use of antibodies against PLAC1 protein as biomarkers of infertility, the diagnostic kit for the detection of the immune response against PLAC1 and the potential use of PLAC1 protein in therapeutic and contraceptive fields. Although several studies have detected in women with infertility a higher prevalence of different kind of antibodies, the association between the recurrence of implantation failure and the above mentioned immune factors remains weak and unspecific. The invention could represent a novel diagnostic tool in the pre-pregnancy check-up.			
State of development	Patent			
Industrial application	Companies active in the diagnostic and medical fields.			
Marketing segment	Medical or veterinary market segments, in the field of pre-pregnancy check-up. Data in the USA market show that 1.5 million U.S. women reported infertility; 6.7 million reported impaired ability to get pregnant or carry a baby to term; 7 million have used infertility services; These numbers are comparable to those of other industrialized nations			
Advantage factor	Anti-PLAC1 antibodies could represent a new and important biomarker associated with infertility: Higher levels of these antibodies associate with higher probability of repeated implantation failure. This could improve the initial diagnostic work upoffered to infertile couples: A test to detect these antibodies could be recommended upfront, as women with higher levels of anti-PLAC1 antibodies could require higher number of repeated IVF cicles to overcome the "immunological barrier"			
Commercial challenge	Women and couples with potential or diagnosed infertility are willing to perform specific tests. IVF centers are also interest in performing tests which offer the potential to diagnose previously undetected defects, which can require different therape approaches.			
Pubblication and customer reference	Matteo M., Greco P., Levi Setti P.E., Morenghi E., De Rosario F., Massenzio F., Albani E., Totaro P., Liso A. Preliminary evidence for high anti-PLAC1 antybody levels in infertile patients with repetead unexplained implantation failu "Placenta" (34), Ed. Elsevier, 2013, pp.335-339 (http://www.placentajournal.org/article/S0143-4004(13)00036-2/pdf)			
Proposal of	Licensing			



APPLICATION FORM

cooperation agreement