

APPENDIX I

Compound 31 is protected by the European Patent EP1682546B1, and Compound 13 and 15 have been published under the Patent Cooperation Treaty with international application number WO2006/095234A2.

EP1682546B1: Peptidomimetic compounds, stereoselective process for their preparation, their use as biologically active synthetic intermediates

The European Patent EP1682546B1 comprises product, process and use claims. The priority number regards to an Italian filing (IT MI20032102) taken place at the Camera di Commercio di Milano in 2003. Then the document has been extended in the international application PCT/IB2004/003464 and published 18 months later with the international publication number WO2005/042531. The document has been finally regionalized in Europe in 2004. The European Patent Office pursued two official actions. The first regarded the lack of inventive step (as commonly happens), the second led to the dispatch of supporting information regarding the experimental data. This information were obviously not included in the claims, in order to avoid the so-called inescapable trap given by the violation of the articles 123(2) and 123(3) of the European Patent Convention.

The grant has been published and mentioned in 2009. Among the designated contracting States (namely those belonging to the European Union), Germany, France, United Kingdom and Italy have been chosen to nationalize the patent. The 9 months period useful for eventual opposition is expired, so the patent is currently under protection in the aforementioned States.

WO2006/095234A2: Integrin targeted synthetic ligands for diagnostic and therapeutic applications

The document WO2006/095234A2 comprises product, process and use claims. The priority number regards to an Italian filing (IT MI2005A000328) taken place at the Camera di Commercio di Milano in 2005. Then the document has been extended in the international application PCT/IB2006/000455 and published 18 months later with the international publication number WO2006/095234A2. The codex A2 means that the file has been published without the International Preliminary Search Report. The document is currently under evaluation for its regionalization in United States and Europe. The patent attorney is waiting for the first official action from the United States Patent Office and from the European Patent Office.

SCIENTIFIC PRODUCTS

PUBLICATIONS

- Arosio D., Manzoni L., Scolastico C., **Araldi E.M.V.** (*currently on work, provisional title*) "Cyclic RGD functionalized gold nanoparticles for cancer targeting"
- Battistini L., Burreddu P., Carta P., Rassu G., Auzzas L., Curti C., Zanardi F., Manzoni L., **Araldi E.M.V.**, Scolastico C., Casiraghi G. (2009) "4-Aminoproline-based arginine-glycine-aspartate integrin binders with exposed ligation points: practical in-solution synthesis, conjugation and binding affinity evaluation". *Org Biomol Chem.* 7(23):4924-35.
- Arosio D., Manzoni L., **Araldi E.M.V.**, Caprini A., Monferini E., Scolastico C. (2009) "Functionalized cyclic RGD peptidomimetics: conjugable ligands for alphavbeta3 receptor imaging". *Bioconj. Chem.* 20(8), 1611-17.
- Manzoni L., Belvisi L., Arosio D., Pilkington-Miksa M., Potenza D., Caprini A., **Araldi E.M.V.**, Monferini E., Mancino M., Podestà F., Scolastico C. (2009). "Cyclic RGD-containing functionalized azabicycloalkane peptides as potent integrin antagonists for tumor targeting". *ChemMedChem* 4(4):615-32.
- **Araldi E.M.V.**, Dell'Aica I., Sogno I., Lorusso G., Garbisa S., Albini A. (2008). "Natural and synthetic weapons targeting inflammation and angiogenesis for chemoprevention of prostate cancer". *Curr Cancer Drug Targets* 8(2):146-55

POSTER

- M. Marchini, R. Colombo, M. Mingozzi, D. Potenza, M. Civera, L. Belvisi, **E.M.V.Araldi**, C. Gennari, U. Piarulli "Potent integrin ligands containing a bifunctional diketopiperazine scaffold". **XIV IASOC 2010 Conference**, Ischia, 25-29 September 2010
- Arosio D., Manzoni L., **E.M.V. Araldi** "cRGD functionalized gold nanoparticle for cancer targeting". **2nd Transalp' Nano 2010 Conference**, Como 3-5 June 2010
- **E.M.V. Araldi**, D. Arosio, L. Manzoni, C. Scolastico "Integrin alphavbeta3 as therapeutic target and imaging biomarker for cancer epithelial cells and vascular endothelial cells". **EMBO Molecular Medicine Workshop**, Portofino 6-9 May 2010
- **E.M.V. Araldi**, L. Manzoni, A. Caprini, A. Gabrieli, C. Scolastico "Biological activity of alphavbeta3 and alphavbeta5 integrin peptidomimetics as novel anti-angiogenic compounds". **Società Italiana di Immunologia Clinica ed Allergologia, Workshop: Angiogenesi, basi molecolari ed implicazioni terapeutiche II**, 21-23 May 2008
- **E.M.V. Araldi**, G. Lorusso, N. Vannini, I. Sogno, S. Garbisa, L. Generoso, A. Cantelmo, D. Noonan, A. Albini "Hyperforin is a potent inhibitor of inflammation-triggered angiogenesis" **Frontiers in Cancer Prevention Research (American Association for Cancer Research)**, 5-8 December 2007, Philadelphia, PA

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