



## Nanovectors for Neurotherapeutic Delivery Part II: Polymeric Nanoparticles

Submitted by Guillaume Bastiat on Mon, 04/27/2015 - 14:26

Titre	Nanovectors for Neurotherapeutic Delivery Part II: Polymeric Nanoparticles
Type de publication	Chapitre
Type	Ouvrage scientifique
Année	2015
Langue	Anglais
Pagination	3-18
Numéro du chapitre	5
Titre de l'ouvrage	Advances in Neurotherapeutic Delivery Technologies
Edition	OMICS Group eBooks
Auteur	Pitorre, Marion [1], Simonsson, Carl [2], Bastiat, Guillaume [3], Salomon, Claudio [4]
Editeur scientifique	Pillay, Viness [5], Choonara, Yahya E [6]
Pays	Etats-Unis
Editeur	OMICS Group eBooks
Ville	Foster City
Mots-clés	Alzheimer's disease [7], engineered polymeric nanoparticles [8], Glioblastoma [9], nanoencapsulation [10], nanomedicine [11], nanotechnology [12], Parkinson's disease [13]
Résumé en anglais	<p>Despite major advances in intracranial surgery and delivery of drugs to the brain, treatment of neurological diseases remains one of the great medical challenges of our days. The complexity of the organ makes surgical procedures complicated, and conventional systemic delivery of drugs to the brain is hampered by low drug selectivity and low drug partitioning over the blood-brain barrier. Due to the high social and economic impacts related to diseases of the central nervous system, development of new improved treatments of brain related disorders is of significant value, both for the patient and for the society. Nanomedicine is a rapidly growing field in the development of novel therapies for treatments of brain pathologies. The scientific progress in nanotechnology has resulted in several new innovative nano-assemblies, with promising medical potentials. Therapeutic benefits related to the use of nanovectors includes, reduced chemical and enzymatic degradation of drugs, increased uptake over biological barriers, improved selectivity by surface modification using targeting ligands, and reduced toxic side effects in non-target tissue. This review discusses various applications of polymeric nanoparticles as nanovectors in treatment of neuronal diseases, specifically illustrated for Alzheimer's and Parkinson's diseases and Glioblastoma.</p>
URL de la notice	<a href="http://okina.univ-angers.fr/publications/ua10384">http://okina.univ-angers.fr/publications/ua10384</a> [14]
Lien vers le document	<a href="http://esciencecentral.org/ebooks/advances-in-neurotherapeutic-delivery-...">http://esciencecentral.org/ebooks/advances-in-neurotherapeutic-delivery-...</a> [15]

---

## Liens

- [1] <http://okina.univ-angers.fr/m.pitorre/publications>
- [2] [http://okina.univ-angers.fr/publications?f\[author\]=24114](http://okina.univ-angers.fr/publications?f[author]=24114)
- [3] <http://okina.univ-angers.fr/guillaume.bastiat/publications>
- [4] [http://okina.univ-angers.fr/publications?f\[author\]=18257](http://okina.univ-angers.fr/publications?f[author]=18257)
- [5] [http://okina.univ-angers.fr/publications?f\[author\]=18291](http://okina.univ-angers.fr/publications?f[author]=18291)
- [6] [http://okina.univ-angers.fr/publications?f\[author\]=18292](http://okina.univ-angers.fr/publications?f[author]=18292)
- [7] [http://okina.univ-angers.fr/publications?f\[keyword\]=8567](http://okina.univ-angers.fr/publications?f[keyword]=8567)
- [8] [http://okina.univ-angers.fr/publications?f\[keyword\]=16378](http://okina.univ-angers.fr/publications?f[keyword]=16378)
- [9] [http://okina.univ-angers.fr/publications?f\[keyword\]=8332](http://okina.univ-angers.fr/publications?f[keyword]=8332)
- [10] [http://okina.univ-angers.fr/publications?f\[keyword\]=16379](http://okina.univ-angers.fr/publications?f[keyword]=16379)
- [11] [http://okina.univ-angers.fr/publications?f\[keyword\]=15273](http://okina.univ-angers.fr/publications?f[keyword]=15273)
- [12] [http://okina.univ-angers.fr/publications?f\[keyword\]=4827](http://okina.univ-angers.fr/publications?f[keyword]=4827)
- [13] [http://okina.univ-angers.fr/publications?f\[keyword\]=8370](http://okina.univ-angers.fr/publications?f[keyword]=8370)
- [14] <http://okina.univ-angers.fr/publications/ua10384>
- [15] <http://esciencecentral.org/ebooks/advances-in-neurotherapeutic-delivery-technologies/>

Publié sur *Okina* (<http://okina.univ-angers.fr>)