

Patent Selections:

The patents annotated in this section have been selected from various patent databases. These recent patents are relevant to the articles published in this journal issue, categorized by therapeutic areas/targets and therapeutic agents related to drug delivery and formulations.

INTRAOCULAR DRUG DELIVERY

1. Robinson, M.R., Burke, J.A., Liu, H., Orilla, W.C., Spada, L.T., Whitcup, S., Ghebremeskel, A.N., Hughes, P.M., Xu, K., Do, M.M. Intraocular sustained release drug delivery systems and methods for treating ocular conditions. *US2010247606 (2010)*.
2. Baciuc, P.C., Hughes, P.M., Blanda, W.M. Valproic acid drug delivery systems and intraocular therapeutic uses thereof. *WO2010093564 (2010)*.
3. Robinson, M.R., Blanda, W.M., Hughes, P.M., Ruiz, G., Orilla, W.C., Whitcup, S.M., Lin, J.-E., Welty, D.F., Spada, L.T. Intraocular drug delivery systems. *EP2218424 (2010)*.
4. Ratner, B.D., Shen, T.T. Device and method for intraocular drug delivery. *US2010074942 (2010)*.
5. Whitcup, S.M. Ophthalmic compositions and uses for treating ophthalmic conditions. *EP2216026 (2010)*.
6. Edelman, J.L., Harrison, K.M., Hughes, P.M., Spada, L.T. Steroid containing ophthalmic drug delivery systems. *EP2200581 (2010)*.
7. Abdulrazik, M. Synergistic combination of bioactive compounds for lowering of intraocular pressure. *WO2010097800 (2010)*.
8. Rekić, R. Drug delivery to the anterior and posterior segments of the eye. *WO2010125416 (2010)*.
9. Ohrländer, M., Soedervall, B. Novel antimicrobial substrates and uses thereof. *EP2012839 (2010)*.
10. Cuevas, K.H. Biocompatible biodegradable intraocular implant system. *WO2010059214 (2010)*.
11. Spada, L.T., Ghebremeskel, A.N., Robinson, M.R. Biodegradable alpha-2 agonist polymeric implants and therapeutic uses thereof. *WO2010056598 (2010)*.
4. Hageman, G.S., Allikmets, R., Dean, M.C., Gold, A.M. Protective complement proteins and age-related macular degeneration. *US2010273720 (2010)*.
5. Albrecht, V., Spaniol, S., Scheglmann, D. Pegylated compounds for age-related macular degeneration. *US2010247626 (2010)*.
6. Seddon, J.M., Daly, M. Markers related to age-related macular degeneration and uses therefor. *WO2010111595 (2010)*.
7. Pericak-Vance, M.A., Haines, J.L., Postel, E., Agarwal, A., Hauser, M.A., Schmidt, S., Scott, W.K. Genetic variants increase the risk of age-related macular degeneration. *US2010190264 (2010)*.

MACULAR EDEMA

1. Brigandi, R.A., Levick, M., Miller, W.H. Treatment of ocular neovascular disorders such as macular degeneration, angioid streaks, uveitis and macular edema. *HR20100559 (2010)*.
2. Ionescu, D., Love, C., Chen, D., Wassel, R.A. Phenylphthalimide analogs for treating diabetic macular edema. *US2010247659 (2010)*.

GANCICLOVIR

1. Xinzi, C., Cha, L., Dajian, Y., Wei, Z. Ganciclovir resin slow-release suspension and preparation method thereof. *CN101791289 (2010)*.
2. Yonghong, L., Shuangqing, Y. Ganciclovir freeze-dry preparation for injection and preparation method thereof. *CN101711746 (2010)*.

MICRONEEDLE

1. Mihara, Y., Oohira, F., Yoshimura, H., Oosuga, K. Method for producing pinholder-shaped microneedles, and microneedle. *WO2010137319 (2010)*.
2. Moga, B.J., Beebe, D.J. Active microneedle array. *US2010305518 (2010)*.
3. Tokumoto, S., Matsudo, T., Kuwahara, T. Method of coating microneedle. *US2010280457 (2010)*.
4. Jeon, M.Y. The treatment and skin care device connected with microneedle and vibration generator. *KR20100101420 (2010)*.
5. Feng, G., Kiihamaeki, J., Hokkanen, A., Heimala, P. Microneedle. *WO2010122222 (2010)*.
6. Chung, B.H., Eum, N.S. Microneedle unit capable of controlling fluid delivery. *WO2010117218 (2010)*.

AGE-RELATED MACULAR DEGENERATION

1. Ambati, J., Kleinman, M.E. CCR3 and its ligands are therapeutic and diagnostic targets for neovascular age-related macular degeneration. *WO2010138591 (2010)*.
2. Bush, A., Masters, C.L., Huggins, P.J., Parsons, J.G., Kok, G.B., Kenche, V., El Sous, M. Method of treatment of age-related macular degeneration (AMD). *KR20100110396 (2010)*.
3. Crabb, J.W., Nagaraj, R.H., Gu, J., Ni, J., Yuan, X. Biomarkers for assessment of age-related macular degeneration. *WO2010132459 (2010)*.

7. Prausnitz, M.R., Edelhauser, H.F., Patel, S.R. Methods and devices for drug delivery to ocular tissue using microneedle. *US2010256597 (2010)*.

TRANSDERMAL DRUG DELIVERY

1. Chuang, H., Eslava, J.P., Hurley, J.P., Ghosh, D., Krystyniak, K., Kellogg, S.C. Skin permeation device for analyte sensing or transdermal drug delivery. *ZA200908281 (2010)*.
2. Dipierro, G., Giannos, S.A. Biosynchronous transdermal drug delivery. *US2010280432 (2010)*.
3. Tang, J. Transdermal drug delivery systems comprising a coated release liner. *KR20100063110 (2010)*.
4. Forlano, P., Scasso, A., Stefano, F. Transdermal drug delivery system for liquid active ingredient. *MX2009010561 (2010)*.
5. Gorodischer, R. Transdermal drug delivery system. *IL150334 (2010)*.

PLUNGER

1. Janish, J. Syringe with two piece plunger rod. *EP2254627 (2010)*.
2. Namey, D. Syringe plunger. *US2010280370 (2010)*.

ACTIVE PHARMACEUTICAL INGREDIENTS

1. Mueller, W.G., Bozkurt, L. Device and method for automatically releasing and measuring active ingredients of a pharmaceutical preparation. *EP2217920 (2010)*.
2. Mohsen, N.M., Armer, T.A., Cook, R.O. Multiple active pharmaceutical ingredients combined in discrete inhalation particles and formulations thereof. Multiple active pharmaceutical ingredients combined in discrete inhalation particles and formulations thereof. *US2010183725 (2010)*.
3. Johansson, D., Nilsson, L., Svedberg, L.-E. Oral pharmaceutical dosage form comprising as active ingredients a proton pump inhibitor together with acetyl salicylic acid. *US2010178334 (2010)*.
4. Jegorov, A., Andrysek, T., Vrana, A., Stuchlik, M., Stuchlik, J., Matha, V. Pharmaceutical compositions for oral and topical administration of poorly soluble active ingredients. *IL158108 (2010)*.
5. Bonnet, G.C., Chognot, D., Soula, O., Constancis, A. Pharmaceutical formulations for the sustained release of active ingredients(s), as well as their applications, especially therapeutic. *ZA200809864 (2010)*.

PEPTIDE AMPHIPHILES

1. Stupp, S.I., Beniash, E., Hartgerink, J.D. Composition and method for self-assembly and mineralization of peptide-amphiphiles. *US2010221224 (2010)*.

2. Hulvat, J., Guler, M. Novel peptide amphiphiles having improved solubility and methods of using same. *KR20100021567 (2010)*.

SELF ASSEMBLY

1. Akcora, P., Kumar, S.K. Anisotropic self-assembly of nanoparticles in composites. *US2010303874 (2010)*.
2. Cheng, J., Na, Y.-H., Lai, K., Rettner, C.T., Sanders, D.P., Li, W.-K. Directed self-assembly of block copolymers using segmented prepatterns. *WO2010133422 (2010)*.
3. Lee, T.S., Kwak, C.K. Water-soluble conjugated polymer, method for producing the same and electrostatic self-assembly of protein pattern biosensor using them. *KR20100094034 (2010)*.

SELF-ASSEMBLING PEPTIDES

1. Tovar, J.D., Diegelmann, S.R., Wall, B.D., Vadehra, G.S. Self-assembling peptides bearing organic electronic functionality and applications employing the same. *WO2010115080 (2010)*.
2. Tarasova, N.I., Tarasov, S.G., Michejda, C.J. Self-assembling nanoparticles composed of transmembrane peptides and their application for specific intra-tumor delivery of anti-cancer drugs. *ZA200903125 (2010)*.
3. Chen, P., Yang, H., Fung, S. Amino acid pairing-based self assembling peptides and methods. *EP2197897 (2010)*.
4. Giovanni, C. Personal-care articles having self-assembling peptides. *CN101808675 (2010)*.

BONE MINERALIZATION

1. Glimcher, L.H. Assays for the identification of compounds that modulate bone formation and mineralization. *US2010204053 (2010)*.
2. Kang, T. NELL-1 enhanced bone mineralization. *CN101678067 (2010)*.

COMBINATION DRUG DELIVERY

1. Tardi, P., Harasym, T., Webb, M., Shew, C., Lawrence, M., Bally, M., Janoff, A. *JP2010180210 (2010)*.
2. Moon, Y., Chang, B.M., Kim, H.J. Optimized drug delivery system manipulating IR/SR gastric retentive applied to combination drug indicated for diabetes mellitus (DM). *KR20100023429 (2010)*.
3. Kwon, G.S., Vakil, R.J. Structuring effect of cholesterol in PEG-phospholipid micelles, drug delivery of amphotericin B, and combination antifungals. *US2010210575 (2010)*.

COMBINATION FORMULATIONS

1. Gottardello, P., Qureshi, A. Antimicrobial formulations comprising a combination of a pyridine thiol and a bis-quinolinium salt. *US2010291168 (2010)*.
2. Sasmal, B.K., Billa, P.R., Nasare, V.D., Mohan, M.S., Jayanthi, S., Dubey, R., Avvaru, S., Satti, P.R., Manas, R.M., Chidipothu, A., Jain, V. Fixed dose drug combination formulations. *WO2010127205 (2010)*.
3. Hagen, M. Adjuvant combination formulations. *US2010233117 (2010)*.
4. Valazza, S., Wagner, R.F., Vippagunta, S. Galenical formulations of organic compounds. *WO2010033954 (2010)*.

CARDIOVASCULAR SYSTEM DRUGS

1. Frank, M. Platform technologies for spontaneously occurring diseases. *WO2010132847 (2010)*.
2. Mayerhofer, S. Cardiovascular protection using anti-aldosteronic progestins. *US7786101 (2010)*.
3. Daemmgen, J. Phosphodiesterase type III (PDE III) inhibitors or Ca²⁺-sensitizing agents for the treatment of hypertrophic cardiomyopathy. *WO2010060874 (2010)*.
4. Dalton, J.T., Miller, D.D. SARMS and method of use thereof. *US7772433 (2010)*.
5. Bevec, D., Cavalli, F., Cavalli, V., Bacher, G. Use of a peptide as a therapeutic agent. *WO2010028676 (2010)*.

NERVOUS SYSTEM DRUGS

1. Rodriguez, V.R.M., Ariel, C.M. Incorporation of an emetic in drugs as a safety system in respect of possible overdoses, particularly in drugs acting on the central nervous system such as benzodiazepine and derivatives, barbiturates. And drugs for paediatric use. *WO2010081920 (2010)*.
2. Legarda, I.J.J. Use and methods of use for an antagonist of the serotonin₃ receptor (5-HT₃) and a selective modulator of chloride channels for the treatment of addiction to or dependence on medicines/drugs or nervous system disorders. *EP2186517 (2010)*.

PELLETIZATION PROCESS

1. Wright, R.B., Boothe, D.A., Umphlett, W.K. Method for abrasion-resistant non-stick surface treatments for pelletization and drying process equipment components. *KR20100087351 (2010)*.
2. Jackson, R.A., Royer, D.J., Waggoner, M.G. Process and apparatus for underwater pelletization of polymers. *EP2228188 (2010)*.
3. Boczon, J., Doll, A., Fenchel, S., Culbert, B.A., Eusebio, F., Morganti, F. Strand pelletization process and device as well as therefrom produced pellets. *LT5664 (2010)*.
4. Deqing, Z., Jian, P., Dongliang, X., Tiejun, C., Yanhong, L., Wenjun, S. Complex manganese ore powder pelletization process. *CN101643840 (2010)*.

HOT MELT & EXTRUSION

1. McGinity, J.W., Schilling, S. Hot-melt extrusion of modified release multi-particulates. *WO2010022193 (2010)*.

PELLETS

1. Gini, L. Process for the preparation of an aerogel in pellet. *WO2010136349 (2010)*.
2. Isaki, T., Karino, T., Katoh, N. Process for production of polyolefin pellets. *US2010295205 (2010)*.
3. Alvarez, E., Mueller, B.L., Weishalla, B.A. Controlled geometry composite micro pellets for use in compression molding. *WO2010132066 (2010)*.
4. Fujimura, K., Beniya, Y., Harao, A., Nagao, Y., Okamoto, S. Process for preparing ethylene-vinyl alcohol copolymer composition, and process for producing ethylene-vinyl alcohol copolymer pellets. *US2010289172 (2010)*.
5. Weigt, A., Kempe, W., Schluetermann, B. Carrier pellets, method for the production thereof and use thereof. *EP2244696 (2010)*.
6. Politis, S., Chalkias, G. Process for producing rapidly disintegrating spheroids (pellets), granules and/or mixtures thereof. *WO2010115475 (2010)*.
7. Kaigler, D.S. Implant pellets and methods for performing bone augmentation and preservation. *EP2234559 (2010)*.