

CURRICULUM VITAE

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Education and Professional Training

2014 – Present	Assistant Professor in University of Shizuoka (Professor: Dr. Shigeru Itai)
2008 – 2014	Research Assistant Professor in University of Shizuoka (Professor: Dr. Shigeru Itai)
2006 - 2008	Research Resident in Kumamoto University (Professor: Dr. Masaki Otagiri)
2006 (2003-2006)	Ph.D. (Pharmaceutical Science) Kumamoto University Department of Biopharmaceutics (Professor: Dr. Masaki Otagiri)
2003 (2001-2003)	M.Sc. (Pharmaceutical Science) Kumamoto University Department of Biopharmaceutics (Professor: Dr. Masaki Otagiri)
2001 (1997-2001)	B.Sc. (Pharmaceutical Science) Kumamoto University

Memberships in Professional Societies

2010 - present	American Association of Pharmaceutical Scientists, USA
2008 - present	The Society of Powder Technology, Japan The Society of pharmaceutical Machinery and Engineering, Japan
2004 - present	The Academy of Pharmaceutical Sciences and Technology, Japan
2004 - present	Japanese Society of The Study of Xenobiotics
2002 - present	Pharmaceutical Society of Japan

Research Fields and Experimental Technique

1. Basic solid formulations

- Optimization of granulation, tableting and coating processes using combination of experimental design, multiple regression analysis, and multivariate data analysis
- Preparation of orally disintegrating tablets composed of powdered crude drugs such as tea and Kampo.
- Search for new developed materials such as a lubricant alternative to magnesium stearate for tableting

2. Advanced DDS formulations

- Wax matrix formulations with sustained release, taste-masking, delayed release and so on for proteins

- Lipid nanoparticle or cubosome formulations containing poorly water-soluble drugs and proteins

3. Development of new physical test methods

- Analysis of available surface area of drugs which is in direct contact with solvent to study the functionalities of additives
- Mathematical model analysis which can predict drug release from wax matrix formulations

Scientific Skills

- Preparation of microspheres and microcapsules using wax and PLGA
- Preparation of albumin- and lipid- nanoparticles
- Granulation experiments with a centrifugal rotating disc processor and a fluid bed roto granulation machine
- Tableting; Preparation of orally disintegrating tablets
- Examination of physicochemical properties of granules and tablets using UV, FT-IR and NMR
- Electron Paramagnetic Resonance (EPR)
- *In vitro* drug release studies
- *In vivo* experiments: operation of small animals such as mouse and rat
- *In vivo* pharmacokinetic analysis; Isotope experiments and LC/MS/MS analysis
- Operation of scanning electron microscope (SEM) and transmission electron microscope (TEM)
- PCR; DNA sequencing; Site-directed mutagenesis
- Protein isolation and purification
- Western blot analysis
- Enzyme Linked Immuno Solvent Assay (ELISA)
- Flow cytometry (FACS) analysis
- BIACORE
- Cell culture
- Preparation of Polyclonal and Monoclonal antibody
- Immunohistochemistry

Honors & Awards

2015	University President Award, University of Shizuoka, for Outstanding Researchers
2015	Elsevier Recognized Reviewer Award 2015 for International Journal of Pharmaceutics
2015	Elsevier Recognized Reviewer Award 2015 for European Journal of Pharmaceutics and Biopharmaceutics
2014	Elsevier Outstanding Reviewer Award 2014 for Advanced Powder Technology

2014-2016	Grant-in-Aid for Scientific research (C), The Japan Society for the Promotion of Science
2014-2016	Grant-in-Aid for Scientific research (C) (representative: Dr. Shigeru Itai), The Japan Society for the Promotion of Science
2014-2016	Grant-in-Aid for Scientific research (C) (representative: Shuji Noguchi. Ph.D.), The Japan Society for the Promotion of Science
2013	Elsevier Recognized Reviewer Award 2013 for Advanced Powder Technology
2012	Global Education Seminar Presentation Award 2012. The Academy of Pharmaceutical Science and Technology, Japan.
2012-2013	Grant-in-Aid for Scientific Research (representative: Dr. Shigeru Itai), Adaptable and Seamless Technology Transfer Program through Target-driven R&D (A-Step) -FS stage, The Japan Society for the Promotion of Science.
2012-2014	Grant-in-Aid for Scientific Research (representative: Dr. Shigeru Itai), Ronpaku program, The Japan Society for the Promotion of Science.
2011	Grant-in-Aid for Scientific Research (representative: Dr. Shigeru Itai) Pharmaceutical and Medical Device Regulatory Science.
2011-2013	Grant-in-Aid for Scientific research (C) (representative: Dr. Shigeru Itai), The Japan Society for the Promotion of Science
2010-2012	Grant-in-Aid for Young Scientists (B), The Japan Society for the Promotion of Science
2007-2009	Grant-in-Aid for Young Scientists (B), The Japan Society for the Promotion of Science
2007	JSPS Core-to-Core Young Investigator Award 2007. The Japan Society for the Promotion of Science

Publications

- 1) Kragh-Hansen U, Minchiotti L, Coletta A, Bienk K, Galliano M, Schiøtt B, Iwao Y, Ishima Y, Otagiri M. Mutants and molecular dockings reveal that the primary L-thyroxine binding site in human serum albumin is not the one which can cause familial dysalbuminemic hyperthyroxinemia. *Biochimica et Biophysica Acta* (2016) in press. (IF=4.56)
- 2) Noguchi S, Atsumi H, Iwao Y, Kan T, Itai S. Nobiletin: a citrus flavonoid displaying potent physiological activity. *Acta Crystallographica Section C* (2016) in press. (IF=0.33)
- 3) Kamiya T, Kondo H, Hiroma H, Yamashita K, Sako K, Iwao Y, Noguchi S, Itai S. Impact of process parameters on Mg-St content and tablet surface wettability in the external lubrication method for a rotary tablet press. *Advanced Powder Technology*, (2016) in press. (IF=2.64)

- 4) Mise R, Iwao Y, Kimura S, Osugi Y, Noguchi S, Itai S. Investigation of physicochemical drug properties to prepare fine globular granules composed of only drug substance in fluidized bed rotor granulation. *Chemical & Pharmaceutical Bulletin*, 63, 1070-1075 (2015). (IF=1.46)
- 5) Kajihara R, Noguchi S, Iwao Y, Yasuda Y, Segawa M, Itai S. Structural investigation of spherical hollow excipient Mannit Q by X-ray microtomography. *International Journal of Pharmaceutics*, 495, 140-143 (2015). (IF=4.01)
- 6) Nozawa K, Iwao Y, Noguchi S, Itai S. Effect of surfactants or a water soluble polymer on the crystal transition of clarithromycin during a wet granulation process. *International Journal of Pharmaceutics*, 495, 204-217 (2015). (IF=4.01)
- 7) Yamada K*, Iwao Y*, Bani-Jaber A, Noguchi S, Itai S. Preparation and evaluation of newly developed chitosan salt coating dispersions for colon delivery without requiring overcoating. *Chemical & Pharmaceutical Bulletin*, 63, 799-806 (2015). (*: Equal contribution) (IF=1.46)
- 8) Iwao Y. Efficient pharmaceutical formulation designs and their development using mathematical and statistical analysis. *Yakugaku Zasshi*, 135, 1129-1134 (2015). (Review article) (IF=0.35)
- 9) Funakoshi Y, Iwao Y, Noguchi S, Itai S. Effect of alkyl chain length and unsaturation of the phospholipid on the physicochemical properties of lipid nanoparticles. *Chemical & Pharmaceutical Bulletin*, 63, 731-736 (2015). (IF=1.46)
- 10) Fujiki S, Watanabe N, Iwao Y, Noguchi S, Mizoguchi M, Iwamura, T, Itai S. Suppressed release of clarithromycin from tablets by crystalline phase transition of metastable polymorph form I. *Journal of Pharmaceutical Sciences*, 104, 2641-2644 (2015). (IF=3.07)
- 11) Aoki H*, Iwao Y*, Mizoguchi M, Noguchi S, Itai S. Clarithromycin highly-loaded gastro-floating fine granules prepared by high-shear melt granulation can enhance the efficacy of Helicobacter pylori eradication. *European Journal of Pharmaceutics and Biopharmaceutics*, 92, 22-27 (2015). (*: Equal contribution) (IF=4.39)
- 12) Iwao Y, Banno N, Kakinuma M, Noguchi S, Itai S. Study of proper use and storage stability of surfactant in dissolution test. *Pharmaceutical and Medical Device Regulatory Science*, 46, 171-179 (2015) (Japanese). (IF=not available)
- 13) Bani-Jaber A, Kobayashi A, Yamada K, Haj-Ali DN, Uchimoto T, Iwao Y#, Noguchi S, Itai S. A newly developed lubricant, chitosan laurate, in the manufacture of acetaminophen tablets. *International Journal of Pharmaceutics*, 483, 49-56 (2015). (#: Corresponding author) (IF=4.01)

- 14) Kajihara R, Noguchi S, Iwao Y, Suzuki Y, Terada Y, Uesugi K, Itai S. Structural changes of polymer-coated microgranules and excipients on tableting investigated by microtomography using synchrotron X-ray radiation. *International Journal of Pharmaceutics*, 481, 132-139 (2015). (IF=4.01)
- 15) Aoki H, Iwao Y, Uchimoto T, Noguchi S, Kajihara R, Ishida M, Takahashi K, Terada Y, Suzuki Y, Itai S. Fine granules showing sustained drug release prepared by high-shear melt granulation using triglycerin full behenate and milled microcrystalline cellulose. *International Journal of Pharmaceutics*, 478, 530-539 (2015). (IF=4.01)
- 16) Iwao Y, Kimura S, Ishida M, Mise R, Yamada M, Namiki N, Noguchi S, Itai S. Preparation and evaluation of highly drug-loaded fine globular granules using a multi-functional rotor processor. *Chemical & Pharmaceutical Bulletin*, 63, 95-101 (2015). (IF=1.46)
- 17) Barman RK, Iwao Y, Noguchi S, Wahed MII, Itai S. Improving flow property of nifedipine loaded solid-lipid nanoparticles by means of silica for oral solid dosage form. *Pharmacology & Pharmacy*, 5, 1119-1129 (2014). (IF=not available)
- 18) Sano S, Iwao Y, Kimura S, Noguchi S, Itai S. Impact of active ingredients on the swelling properties of orally disintegrating tablets prepared by microwave treatment. *International Journal of Pharmaceutics*, 468, 234-242 (2014). (IF=4.01)
- 19) Barman RK, Iwao Y, Islam Md, Funakoshi Y, Noguchi S, Wahed MII, Itai S. In vivo pharmacokinetic and hemocompatible evaluation of lyophilization induced nifedipine solid-lipid nanoparticle. *Pharmacology & Pharmacy*, 5, 455-461 (2014). (IF=not available)
- 20) Barman RK, Iwao Y, Funakoshi Y, Ranne AH, Noguchi S, Wahed MII, Itai S. Development of highly stable nifedipine solid-lipid nanoparticles. *Chemical & Pharmaceutical Bulletin*, 62, 399-406 (2014). (IF=1.46)
- 21) Yamanaka M, Yokota S, Iwao Y, Noguchi S, Itai, S. Development and evaluation of a tacrolimus cream formulation using a binary solvent system. *International Journal of Pharmaceutics*, 464, 19-26 (2014). (IF=4.01)
- 22) Kimura S, Iwao Y, Ishida M, Noguchi S, Itai S Uchida S, Yamada M, Namiki N. Evaluation of the physicochemical properties of fine globular granules prepared by a multi-functional rotor processor. *Chemical & Pharmaceutical Bulletin*, 62, 309-315 (2014). (IF=1.46)
- 23) Noguchi S, Takiyama K, Fujiki S, Iwao Y, Miura K, Itai S. Polymorphic transformation of antibiotic clarithromycin under acidic condition. *Journal of Pharmaceutical Sciences*, 103, 580-586 (2014).

(IF=3.07)

- 24) Yamada N, Mise R, Ishida M, Iwao Y, Noguchi S, Itai S. Effects of the centrifugal coating and centrifugal fluidized bed coating methods on the physicochemical properties of sustained-release microparticles using a multi-functional rotor processor. *Advanced Powder Technology*, 25, 430-435 (2014). (IF=2.64)
- 25) Uchimoto T, Iwao Y, Hattori H, Noguchi S, Itai S. Determination of useful ranges of mixing conditions for glycerin fatty acid ester by multiple regression analysis. *Chemical & Pharmaceutical Bulletin*, 61, 1143-1148 (2013). (IF=1.46)
- 26) Takabe H, Ohkuma M, Iwao Y, Noguchi S, Itai S. One-step preparation of poly-lactic-co-glycolic-acid microparticles to prevent the initial burst release of encapsulated water-soluble proteins. *Pharmacology & Pharmacy*, 4, 578-583 (2013). (IF=not available)
- 27) Funakoshi Y*, Iwao Y*, Noguchi S, Itai S. Lipid nanoparticles with no surfactant improve oral absorption rate of poorly water-soluble drug. *International Journal of Pharmaceutics*, 451, 92-94 (2013). (*: Equal contribution). (IF=4.01)
- 28) Sano S, Iwao Y, Kimura S, Noguchi S, Itai S. Design and evaluation of microwave-treated orally disintegrating tablets containing polymeric disintegrant and mannitol. *International Journal of Pharmaceutics*, 448, 132-141 (2013). (IF=4.01)
- 29) Iwao Y, Tanaka S, Uchimoto T, Noguchi S, Itai S. An easy-to-use approach for determining the disintegration ability of disintegrants by analysis of available surface area. *International Journal of Pharmaceutics*, 448, 1-8 (2013). (IF=4.01)
- 30) Noguchi S, Kajihara R, Iwao Y, Fujinami Y, Suzuki Y, Terada Y, Uesugi K, Miura K, Itai S. Investigation of internal structure of fine granules by microtomography using synchrotron X-ray radiation. *International Journal of Pharmaceutics*, 445, 93-98 (2013). (IF=4.01)
- 31) Uchimoto T*, Iwao Y*, Yamamoto T, Sawaguchi K, Moriuchi T, Noguchi S, Itai S. Newly developed surface modification punches treated with alloying techniques reduce sticking during the manufacture of ibuprofen tablets. *International Journal of Pharmaceutics*, 441, 128-134 (2013). (*: Equal contribution). (IF=4.01)
- 32) Miyanishi H, Nemoto T, Mizuno M, Mimura H, Kitamura S, Iwao Y, Noguchi S, Itai S. Evaluation of crystallization behavior on the surface of nifedipine solid dispersion powder using inverse gas chromatography. *Pharmaceutical Research*, 30, 502-511 (2013). (IF=3.42)

- 33) Miyamoto Y, Iwao Y, Mera K, Watanabe H, Kadowaki D, Ishima Y, Giam Chuang VT, Sato K, Otagiri M, Maruyama T. A uremic toxin, 3-carboxy-4-methyl-5-propyl-2-furanpropionate induces cell damage to proximal tubular cells via the generation of a radical intermediate. *Biochemical Pharmacology*, 84, 1207-1214 (2012). (IF=5.09)
- 34) Shiino K*, Iwao Y*, Fujinami Y, Itai S. Preparation and evaluation of granules with pH-dependent release by melt granulation. *International Journal of Pharmaceutics*, 431, 70-77 (2012). (*: Equal contribution). (IF=4.01)
- 35) Nitanaï Y, Agata Y, Iwao Y, Itai S. A novel mathematical model considering change of diffusion coefficient for predicting dissolution behavior of acetaminophen from wax matrix dosage form. *International Journal of Pharmaceutics*, 428, 82-90 (2012). (IF=4.01)
- 36) Iwao Y, Ishima Y, Yamada J, Noguchi T, Kragh-Hansen U, Mera K, Honda D, Suenaga A, Maruyama T, Otagiri M. Quantitative evaluation of the role of cysteine and methionine residues in the antioxidant activity of human serum albumin using recombinant mutants. *IUBMB Life*, 64, 450-454 (2012). (IF=3.37)
- 37) Noguchi S, Fujiki S, Iwao Y, Miura K, Itai S. Clarithromycin monohydrate: a synchrotron X-ray powder study. *Acta Crystallographica Section E*, 68, o667-o668 (2012). (IF=0.35)
- 38) Noguchi S, Miura K, Fujiki S, Iwao Y, Itai S. Structure of clarithromycin form I determined by synchrotron X-ray powder diffraction. *Acta Crystallographica Section C*, 68, o41-o44 (2012). (IF=0.33)
- 39) Sano S, Iwao Y, Kimura S, Itai S. Preparation and evaluation of swelling induced-orally disintegrating tablets by microwave irradiation. *International Journal of Pharmaceutics*, 416, 252-259 (2011). (IF=4.01)
- 40) Agata Y, Iwao Y, Shiino K, Miyagishima A, Itai S. A theoretical approach to evaluate the release rate of acetaminophen from erosive wax matrix dosage forms. *International Journal of Pharmaceutics*, 414, 63-68 (2011). (IF=4.01)
- 41) Otsuka T*, Iwao Y*, Miyagishima A, Itai S. Application of principal component analysis enables to effectively find important physical variables for optimization of fluid bed granulator conditions. *International Journal of Pharmaceutics*, 409, 81-88 (2011). (*: Equal contribution) (IF=4.01)
- 42) Fujiki S, Iwao Y, Kobayashi M, Miyagishima A, Itai S. Stabilization mechanism of clarithromycin tablet under gastric pH conditions. *Chemical & Pharmaceutical Bulletin*, 59, 553-558 (2011). (IF=1.46)
- 43) Uchimoto T*, Iwao Y*, Takahashi K, Tanaka S, Agata Y, Iwamura T, Miyagishima A, Itai S. A

comparative study of glycerin fatty acid ester and magnesium stearate on the dissolution of acetaminophen tablets using the analysis of available surface area. *European Journal of Pharmaceutics and Biopharmaceutics*, 78, 492-498 (2011). (*: Equal contribution) (IF=4.39)

- 44) Taguchi K, Iwao Y, Watanabe H, Kadowaki D, Sakai H, Kobayashi K, Horinouchi H, Maruyama T, Otagiri M. Repeated injection of high doses of hemoglobin encapsulated liposomes (hemoglobin-vesicles) induces accelerated blood clearance in a hemorrhagic shock rat model. *Drug Metabolism and Disposition*, 39, 484-489 (2011). (IF=3.61)
- 45) Umeki N, Sato T, Harada M, Takeda J, Saito S, Iwao Y, Itai S. Preparation and evaluation of biodegradable films containing the potent osteogenic compound BFB0261 for localized delivery. *International Journal of Pharmaceutics*, 404, 10-18 (2011). (IF=4.01)
- 46) Miyagishima A, Fujiki S, Okimura A, Arahata S, Inagaki S, Iwao Y, Itai S. Novel decaffeination of green tea using a special picking method and shortening of the rolling process. *Food Chemistry*, 125, 878-883 (2011). (IF=3.90)
- 47) Shiino K*, Iwao Y*, Miyagishima A, Itai S. Optimization of a novel wax matrix system using aminoalkyl methacrylate copolymer E and ethylcellulose to suppress the bitter taste of acetaminophen. *International Journal of Pharmaceutics*, 395, 71-77 (2010). (*: Equal contribution) (IF=4.01)
- 48) Miyamoto Y*, Iwao Y*, Tasaki Y, Sato K, Ishima Y, Watanabe H, Kadowaki D, Maruyama T, Otagiri M. The uremic solute indoxyl sulfate acts as an antioxidant against superoxide anion radicals under normal-physiological conditions. *FEBS Letter*, 584, 2816-2820 (2010). (*: Equal contribution) (IF=3.17)
- 49) Hirata K, Maruyama T, Watanabe H, Maeda H, Nakajou K, Iwao Y, Ishima Y, Katsumi H, Hashida M, Otagiri M. Genetically engineered mannosylated-human serum albumin as a versatile carrier for liver-selective therapeutics. *Journal of Control Release*, 145, 9-16 (2010). (IF=8.10)
- 50) Umeki N, Sato T, Harada M, Takeda J, Saito S, Iwao Y, Itai S. Preparation and evaluation of biodegradable microspheres containing a new potent osteogenic compound and new synthetic polymers for sustained release. *International Journal of Pharmaceutics*, 392, 42-50 (2010). (IF=4.01)
- 51) Kimura S*, Iwao Y*, Ichida M, Uchimoto T, Miyagishima A, Sonobe T, Itai S. Optimal conditions to prepare fine globular granules with a multi-functional rotor processor. *International Journal of Pharmaceutics*, 391, 244-247 (2010). (*: Equal contribution) (IF=4.01)
- 52) Agata Y, Iwao Y#, Miyagishima A, Itai S. Novel mathematical model for predicting the dissolution

profile of spherical particles under non-sink conditions. *Chemical & Pharmaceutical Bulletin*, 58, 511-515 (2010). (#: Corresponding author) (IF=1.46)

- 53) Uchimoto T*, Iwao Y*, Ikegami Y, Murata T, Sonobe T, Miyagishima A, Itai S. Lubrication properties of potential alternative lubricants, glycerin fatty acid esters, to magnesium stearate. *International Journal of Pharmaceutics*, 386, 91-98 (2010). (*: Equal contribution) (IF=4.01)
- 54) Ohshima H, Miyagishima A, Kurita T, Makino Y, Iwao Y#, Sonobe T, Itai S. Freeze-dried nifedipine-lipid nanoparticles with long-term nano-dispersion stability after reconstitution. *International Journal of Pharmaceutics*, 377, 180-184 (2009). (#: Corresponding author) (IF=4.01)
- 55) Taguchi K, Maruyama T, Iwao Y, Sakai H, Kobayashi K, Horinouchi H, Tsuchida E, Kai T, Otagiri M. Pharmacokinetics of single and repeated injection of hemoglobin-vesicles in hemorrhagic shock rat model. *Journal of Control Release*, 136, 232-239 (2009). (IF=8.10)
- 56) Iwao Y, Hiraike M, Kragh-Hansen U, Kawai K, Suenaga A, Maruyama T, Otagiri M. Altered chain-length and glycosylation modify the pharmacokinetics of human serum albumin. *Biochimica et Biophysica Acta*, 1794, 634-641 (2009). (IF=3.13)
- 57) Iwao Y, Nakajou K, Nagai R, Kitamura K, Anraku M, Maruyama T, Otagiri M. CD36 is one of important receptors promoting renal tubular injury by advanced oxidation protein products. *American Journal of Physiology- Renal Physiology*, 295, F1871-1880 (2008). (IF=4.42)
- 58) Nagai R, Fujiwara Y, Mera K, Motomura K, Iwao Y, Tsurushima K, Nagai M, Takeo K, Yoshitomi M, Otagiri M, Ikeda T. Usefulness of antibodies for evaluating the biological significance of AGEs. *Annals of the New York Academy of Sciences*, 1126, 38-41 (2008).(IF=4.38)
- 59) Iwao Y, Hiraike M, Kragh-Hansen U, Mera K, Noguchi T, Anraku M, Kawai K, Maruyama T, Otagiri M. Changes of net charge and α -helical content affect the pharmacokinetic properties of human serum albumin. *Biochimica et Biophysica Acta*, 1774, 1582-1590 (2007). (IF=3.13)
- 60) Nagai R, Mera K, Nakajou K, Fujiwara Y, Iwao Y, Imai H, Murata T, Otagiri M. The ligand activity of AGE-proteins to scavenger receptors is dependent on their rate of modification by AGEs. *Biochimica et Biophysica Acta*, 1772, 1192-1198 (2007). (IF=4.97)
- 61) Zsila F, Iwao Y. The drug binding site of human alpha1-acid glycoprotein: Insight from induced circular dichroism and electronic absorption spectra. *Biochimica et Biophysica Acta*, 1770, 797-809 (2007). (IF=4.56)
- 62) Kragh-Hansen U, Watanabe H, Nakajou K, Iwao Y, Otagiri M. Chain length-dependent binding of fatty

acid anions to human serum albumin studied by site-directed mutagenesis. *Journal of Molecular Biology*, 363, 702-712 (2006). (IF=4.33)

- 63) Iwao Y, Anraku M, Hiraike M, Kawai K, Nakajou K, Kai T, Suenaga A, Otagiri M. The structural and pharmacokinetic properties of oxidized human serum albumin, advanced oxidation protein products (AOPP). *Drug Metabolism and Pharmacokinetics*, 21, 140-146 (2006). (IF=2.57)
- 64) Iwao Y, Anraku M, Yamasaki K, Kragh-Hansen U, Kawai K, Maruyama T, Otagiri M. Oxidation of Arg-410 promotes the elimination of human serum albumin. *Biochimica et Biophysica Acta*, 1764, 743-749 (2006). (IF=3.13)
- 65) Ma SF, Anraku M, Iwao Y, Yamasaki K, Kragh-Hansen U, Yamaotsu N, Hirono S, Ikeda T, Otagiri M. Hydrolysis of angiotensin II receptor blocker prodrug olmesartan medoxomil by human serum albumin and identification of its catalytic active sites. *Drug Metabolism and Disposition*, 33, 1911-1919 (2005). (IF=3.61)
- 66) Watanabe H, Kragh-Hansen U, Tanase S, Nakajou K, Mitarai M, Iwao Y, Maruyama T, Otagiri M. Conformational stability and warfarin-binding properties of human serum albumin studied by recombinant mutants. *Biochemical Journal*. 357, 269-274 (2001). (IF=4.40)

Invited Presentations

1. Iwao Y. Scavenging activity of indoxyl sulfate against superoxide anion radicals. ***Winter school for young investigators in Washington DC***, Bethesda, Maryland, USA, November 12, 2007
2. Iwao Y. Scavenging activity of indoxyl sulfate against superoxide anion radicals. ***Dr. Mason's lab group meeting***, NIEHS/NIH, Research Triangle Park, North Carolina, USA, November 21, 2007**(Invited by Dr. Mason R)**
3. Iwao Y. Innovation of New Functionality by Pharmaceutical Engineering. ***Dr. Berkland's lab group meeting***, Pharmaceutical Chemistry, The University of Kansas, Lawrence, Kansas, USA, September 23, 2010 **(Invited by Berkland C)**
4. Iwao Y. Innovation for taste-masking with BASF polymers. BASF Workshop ***ExActCoat+2011***, Shanghai, China, November 21, 2011 **(Invited by BASF)**
5. Iwao Y. Innovation of New Functionality by Pharmaceutical Engineering. APSTJ Global Education Seminar East 2012-01, October 5, 2012 **(Invited by APSTJ)**
6. Iwao Y. Design of clarithromycin formulation based on crystalline changes. SEMINAIRE DE LA FACULTE DE PHARMACIE ET DE L'ECOLE DOCTORALE THEMATIQUE EN SCIENCES PHARMACEUTIQUES, March 21, 2014 **(Invited by Universite Libre de Bruxelles, Bruxelles, Belgium)**
7. Iwao Y. Design of novel sustained-release clarithromycin formulations by means of crystalline changes of

clarithromycin and high-shear melt granulation method. Cutting edge Seminar, Program for Leading Graduate Schools, health life science: Interdisciplinary and Glocal Oriented HIGO program. Kumamoto. 05.27. 2015 (Invited by Kumamoto University)

Poster

1. **Iwao Y**, Makoto Anraku, Keiichi Kawai, Ulrich Kragh-Hansen, and Masaki Otagiri. Structural and functional characterization of mutants of human serum albumin with a decreased physiological half-life. 2nd Pharmaceutical Sciences World Congress (PSWC) 2004.05 Kyoto, Japan.
2. **Iwao Y**, Makoto Anraku, Mikako Hiraike and Masaki Otagiri. Advanced Oxidation Protein Products May Cause Renal Tubular Injury through Intracellular Overgeneration of ROS. 13th North American ISSX/20th JSSX Joint Meeting 2005.10 Hawaii, USA
3. **Iwao Y**, Mikako Hiraike, Makoto Anraku, Keisuke Nakajou, Kenichiro Kitamura and Masaki Otagiri. Advanced Oxidation Protein Products May Cause Renal Tubular Injury through Intracellular Overgeneration of ROS and TGF- β 1. International Society for Study of Xenobiotics (ISSX) 2006.05, Jeju, Korea
4. **Iwao Y**, Mikako Hiraike, Ulrich Kragh-Hansen, Keiichi Kawai, Toru Maruyama and Masaki Otagiri. The elimination of serum albumin is dependent on its conformational stability. 3rd Pharmaceutical Sciences World Congress (PSWC) 2007.04 Amsterdam, Netherlands
5. **Iwao Y**, Mikako Hiraike, Ulrich Kragh-Hansen, Keiichi Kawai, Toru Maruyama¹ and Masaki Otagiri. Changes of net charge and α -helical content affect the pharmacokinetic properties of human serum albumin. 4th World Conference on Drug Absorption, Transport and Delivery (WCDATD) 2007.06 Kanazawa, Japan
6. **Iwao Y**, Shin-ichiro Kimura, Atsuo Miyagishima, Shigeru Itai. Optimal procedure to obtain fine globular granules with a multi-functional rotor processor. FIP 2010 PSWC and AAPS Annual Meeting and Exposition, November 17, 2010, New Orleans, USA
7. **Iwao Y**, Tomoko Otsuka, Shuji Noguchi, Shigeru Itai. Optimal Conditions of a Fluid Bed Granulator to Manufacture Granules with Excellent Compaction and Tablet Properties by Means of Principal Component Analysis. 2011 AAPS Annual Meeting and Exposition, October 24, 2011, Washington, D.C., USA
8. **Iwao Y**, Shoko Tanaka, Shuji Noguchi, Shigeru Itai. An easy-to-use approach for determining the disintegration ability of disintegrants by analysis of available surface area. 2013 AAPS Annual Meeting and Exposition, November 10, 2013, Sanantonio, USA

References

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