TECHNOLOGY CATALYSTS

Worldwide contacts for additional information

World Headquarters

Ajay Rastogi
Vice President
Technology Catalysts International Corporation
605 Park Avenue
Falls Church, VA 22046 USA
Telephone: (703) 531-0257
Facsimile: (703) 237-0042
E-mail: arastogi@technology-catalysts.com
Website: www.technology–catalysts.com

Europe

Graham L. Crawford, MSc
Managing Director
Technology Catalysts International UK
Blacksmiths
Clifton Road
Newton Blossomville
Bedford MK43 8AS, UK
Telephone: +44 1234 881583
Facsimile: +44 1234 881027
E-mail: gcrawford@technology-catalysts.com

Gerhard Wallenwein, Ph.D.
Managing Director
Laves Chemie Consulting
Antonitergasse 4
D-65812 Bad Soden, Germany
Telephone: +49 6196 62057
Facsimile: +49 6196 27837
E-mail: laveschemie@t-online.de
Website: www.laveschemie.de

Jana Kuhnlova
Executive Managing Director
Inventia s.r.o.
Na Belidle 3
150 00 Praha 5 - Smíchov, Czech Republic
Telephone: +420 2 22247484
Facsimile: +420 2 24218645
E-mail: kuhnlova@inventia.cz
Website: www.inventia.cz

Milos Hraba
Manager NBD
Inventia s.r.o.
Na Belidle 3
150 00 Praha 5 - Smíchov, Czech Republic
Telephone: +420 2 22247484
Facsimile: +420 2 24218645
E-mail: hraba@inventia.cz
Website: www.inventia.cz

Asia

Sansei Oka
Japan Business Representative
TCI Japan
4-18-11-101, Takada-Higashi
Kohoku-Ku, Yokohama 223-0065, Japan
Telephone: +81 45 543 5578
E-mail: soka@technology-catalysts.com

Hiromasa Yamamoto
Senior Research Associate
Sumika Technical Information Service Inc.
Tokyo Sumitomo Twin Bldg. (East)
27-1, Shinkawa 2-chome
Chuo-ku, Tokyo 104-0033, Japan
Telephone: +81 3 5543 5875
Facsimile: +81 3 5543 5945
E-mail: hiromasa-yamamoto@ya.sumitomo-chem.co.jp
Website: www.stis.co.jp

Don Ki Kim
President and CEO, Pharmacist
Global Damon Pharma
Suite 1803, Garden Tower Bldg.
98-78, Woonni-Dong, Chongro-ku
Seoul 110-795, Korea
Telephone: +82 2 3673 2367
Facsimile: +82 2 3673 2369
E-mail: dkkim@gdp.co.kr

Jaison Abraham
General Manager
TCI India
Level 4, Dynasty, 'A' Wing
Andheri-Kurla Road
Andheri East
Mumbai 400 069, India
Telephone: +91 22 4030 9499
Facsimile: +91 22 4030 9199
Mobile: +91 981932 8598
E-mail: jabraham@technology-catalysts.com

R.K. Gupta
Managing Director
Industrial Development Services Pvt. Ltd.
M-1 Kanchenjunga
18 Barakhamba Road
New Delhi 110 001, India
Telephone: +91 11 2 331 2287; 2 331 4714
Facsimile: +91 11 23738227
E-mail: ids@del2.vsnl.net.in
Website: www.ids-india.org

South America

Carlos A. Massone, M.D.
President
Qualia S.A.
Jeronimo Salguero 2533, Piso 12 "A"
1425 Buenos Aires, Argentina
Telephone: +54 11 4807 3433
Facsimile: +54 11 4807 2933
E-mail: carlos.massone@qualia.com.ar
Website: www.qualia.com.ar

Visit TCI's website at:
www.technology-catalysts.com

Orally Disintegrating Tablet and Film Technologies

Seventh Edition

Technologies, Products, & Market Analysis

TECHNOLOGY CATALYSTS

About Technology Catalysts International

Technology Catalysts International (TCI) was founded in 1979 to provide consulting services that satisfy the technology transfer and business research needs of industry. We specialize in technology transfer, technology assessment, and technology portfolio management. The firm is headquartered in Falls Church, Virginia; a suburb of Washington, D.C. Our global network includes offices in Japan, Korea, India, China, Argentina, the United Kingdom, Germany, and the Czech Republic.

Our research staff is comprised of professionals with backgrounds in a variety of technical disciplines, with additional expertise in international marketing, licensing, finance and business development. They are skilled in providing clients with strategically important competitive information worldwide. The breadth of our experience assures clients of high quality, actionable information, and complete coverage on topics of interest.

TCI's core consulting services are based on continuous monitoring of technological product development activities on a global basis. We provide consulting and technology transfer services to leading product developers and manufacturers in North and South America, Europe, and Asia. Our client base consists of small, medium, and large corporations.

For more information on our services and capabilities, please visit TCI's website at:

www.technology-catalysts.com

Report Summary

Orally disintegrating tablets (ODTs) and oral thin films (OTFs) continue to be rapidly growing markets. ODTs and OTFs are popular among patients with dysphagia (difficulty swallowing), which is common in children and the elderly. Statistics have shown that four out of five patients prefer orally disintegrating dosage forms over conventional solid oral dosages. These factors, coupled with convenience and compliance advantages, have been (and will continue to) pave the way for ODT and OTF drug product growth.

The combined US, EU, and Japanese ODT market has increased 24 percent in the past two years to surpass $8.4 billion in 2011. Increased generic competition has further expanded the ODT market volume — the number of ODT products has doubled over the past two years, mostly due to new generic approvals. While increased generic approvals have increased the ODT market by volume, generic competition has eroded the US and EU ODT markets based on revenue. The impact of generic competition in Japan remains to be seen. Traditionally, generics have had a minimal impact on branded sales in the Japanese market. However, if generics become increasingly accepted in Japan, then they may begin to erode the market. ODTs are also gaining popularity in emerging markets such as the BRIC countries, Korea, and the MENA region. Based on current global growth trends, the ODT market is expected to reach $12 billion by 2018.

The OTF market has shifted in the past few years from primarily OTC products to a prescription product-focused market. While OTC OTF products have been on the decline, multiple prescription OTFs have been approved in the US, EU, and Japan. Reckitt Benckiser's Suboxone® (buprenorphine and naloxone) thin film has been particularly successful with sales of $513 million in 2011. Companies including MonoSol Rx, Labtec and APR Pharma, and IntelGenx are actively developing pipeline Rx OTF formulations for the treatment of CNS disorders, allergies, and diabetes. The approval of other prescription thin films with key APIs will drive the future growth of the OTF market, which could potentially reach $1 billion in 2015.

The Market, Pipeline Candidates, Opportunities

This report covers the current market for ODTs and OTFs, and future forecasts based on active pipeline products, life cycle management drug candidates, and licensing and business development opportunities. There are over 90 companies with ODT and thin film technology described in detail in this report; many of whom are actively out-licensing molecules and platforms in early and late stage development. DDS technology providers interested in co-developing and/or manufacturing new oral fast-dissolving products are also profiled.

New to the Seventh Edition:

- Update on the first prescription thin films in the US, EU, and Japan
- ODT market analysis of emerging regions
- The growing Japanese generic market
- Profiles on new ODT and OTF technologies
- ODT and OTF pipeline analysis
- Dry syrups and jellies as competitive novel dosage forms
- Innovative developments for delivery of proteins and peptides via ODTs and OTFs
- New nutraceutical thin film technologies and products

Key Information Presented

Market Analysis

- Orally Disintegrating Tablets:
  - Market revenue growth from 2005-2011
  - Sales for leading Rx ODTs in 2010-2011
  - Unit sales growth from 2007-2011
  - Market share and growth shift by region
  - Market share by therapeutic category
  - Brand erosion by generics and market forecast
- Oral Thin Films:
  - OTC vs. Rx OTF market for 2009 vs. 2011
  - Late-stage Rx products
  - Sales potential for key APIs
  - US OTC OTF sales from 2007-2011
  - Sales of leading OTC OTF brands from 2007-2011
  - Market forecast

Product Introductions

- Recent ODT products approved from 2010-12 in the US
- ODT products launched in Europe and Japan, 2010-2012
- OTF OTC drugs launched in US/EU from 2003-2012
- OTF nutraceuticals/vitamins launched in North America from 2003-2012
- Prescription OTFs approved in US, EU, and Japan
- OTFs in Asia

Technology Licensing Opportunities

- Detailed profiles sorted by technology type:
  - ODT technologies: 42 profiles
  - OTF technologies: 49 profiles
  - Tastemasking for ODT/OTF: 19 profiles
  - Excipient platforms for ODT/OTF: 15 profiles
- Technologies from North America, Europe, and Asia
- Patent and pipeline information for each technology
- Contact information to initiate licensing agreements

Orally Disintegrating Tablet and Film Technologies

SEVENTH EDITION

Technologies, Products, & Market Analysis

ORDER FORM

Per Copy (❑ Paper Copy ❑ PDF Copy) $4,950

Extra paper copies x _____ . . . . . .$500 ea.

Note: All prices are U.S. dollars

Total Amount Due: _____

Shipping/Purchase Information:

Name _____

Title _____

Company _____

Address _____

_____

Telephone _____

Facsimile _____

Email _____

Signature _____

Date _____

❑ Credit Card (❑ MC ❑ Visa ❑ Amex)

Card Number _____

Expiration Date _____Security code (3 or 4 digits) _____

❑ Check enclosed, made payable to Technology Catalysts International

❑ Send invoice to the address above

Wire transfer: please contact TCI directly

Mail, Fax, or Phone your order to:

Ajay Rastogi
Vice President
Technology Catalysts International
605 Park Avenue, Falls Church, VA 22046, USA
Telephone: (703) 531-0257
Facsimile: (703) 237-0042
E-mail: arastogi@technology-catalysts.com