



THE OXFORD HANDBOOK OF

THE ECONOMICS OF THE BIOPHARMACEUTICAL INDUSTRY



Consulting Editors

MICHAEL SZENBERG

LUBIN SCHOOL OF BUSINESS, PACE UNIVERSITY

LALL RAMRATTAN

UNIVERSITY OF CALIFORNIA, BERKELEY EXTENSION



THE OXFORD HANDBOOK OF

THE ECONOMICS OF THE BIOPHARMACEUTICAL INDUSTRY

Edited by

PATRICIA M. DANZON AND SEAN NICHOLSON





OXFORD UNIVERSITY PRESS

Oxford University Press, Inc., publishes works that further Oxford University's objective of excellence in research, scholarship, and education.

Oxford New York

Auckland Cape Town Dar es Salaam Hong Kong Karachi Kuala Lumpur Madrid Melbourne Mexico City Nairobi New Delhi Shanghai Taipei Toronto

With offices in

Argentina Austria Brazil Chile Czech Republic France Greece Guatemala Hungary Italy Japan Poland Portugal Singapore South Korea Switzerland Thailand Turkey Ukraine Vietnam

Copyright © 2012 by Oxford University Press

Published by Oxford University Press, Inc. 198 Madison Avenue, New York, New York 10016 www.oup.com

Oxford is a registered trademark of Oxford University Press

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the prior permission of Oxford University Press.

Library of Congress Cataloging-in-Publication Data
The Oxford handbook of the economics of the biopharmaceutical industry /
edited by Patricia M. Danzon and Sean Nicholson.

p. cm.

Includes bibliographical references and indexes.

ISBN 978-0-19-974299-8 (cloth: alk. paper) 1. Pharmaceutical industry.

2. Biopharmaceutics—Economic aspects. I. Danzon, Patricia Munch, 1946–

II. Nicholson, Sean. III. Title: Economics of the biopharmaceutical industry.

HD9665-5.094 2012

338.4′76157—dc23

2011040815

1 3 5 7 9 8 6 4 2 Printed in the United States of America on acid-free paper



DOCKET

Explore Litigation Insights



Docket Alarm provides insights to develop a more informed litigation strategy and the peace of mind of knowing you're on top of things.

Real-Time Litigation Alerts



Keep your litigation team up-to-date with **real-time** alerts and advanced team management tools built for the enterprise, all while greatly reducing PACER spend.

Our comprehensive service means we can handle Federal, State, and Administrative courts across the country.

Advanced Docket Research



With over 230 million records, Docket Alarm's cloud-native docket research platform finds what other services can't. Coverage includes Federal, State, plus PTAB, TTAB, ITC and NLRB decisions, all in one place.

Identify arguments that have been successful in the past with full text, pinpoint searching. Link to case law cited within any court document via Fastcase.

Analytics At Your Fingertips



Learn what happened the last time a particular judge, opposing counsel or company faced cases similar to yours.

Advanced out-of-the-box PTAB and TTAB analytics are always at your fingertips.

API

Docket Alarm offers a powerful API (application programming interface) to developers that want to integrate case filings into their apps.

LAW FIRMS

Build custom dashboards for your attorneys and clients with live data direct from the court.

Automate many repetitive legal tasks like conflict checks, document management, and marketing.

FINANCIAL INSTITUTIONS

Litigation and bankruptcy checks for companies and debtors.

E-DISCOVERY AND LEGAL VENDORS

Sync your system to PACER to automate legal marketing.

