

Immune Design Corp

COMPANY AND PIPELINE OVERVIEW REPORT

A comprehensive coverage of the company and a summary of the drug pipeline portfolio.

Publication Date: 02-May-2015

THOMSON REUTERS

3 Times Square New York, New York 10036 United States

Tel: +1 646 223 4000

thomsonreuters.com



ABOUT COMPANY AND PIPELINE OVERVIEW REPORT

Thomson Reuters provides the knowledge, tools, and expertise to help support drug discovery and development activities, IP portfolio optimization, identification of licensing and partnering opportunities, delivery of successful regulatory submissions, and the ability to keep current with the rapidly-changing pharmaceutical and chemical markets, supporting informed, early decisions.

This report was created by Thomson Reuters, using information from *Thomson Reuters Cortellis*™ for *Competitive Intelligence*; a comprehensive, proven intelligence solution that leverages the most accurate, complete, and widely respected drug pipeline information. From drug discovery and development activities to patent reports, the latest deals, and partnering opportunities, *Cortellis* can provide the confidence to make the most informed business decisions, faster. *Cortellis for Competitive Intelligence* provides accurate and validated information on pharmaceutical and biotechnology companies globally, their drug pipelines, deals, patents, and clinical trials, plus breaking industry news and conference coverage. All contained in one simple, highly intuitive research platform.

Cortellis Company and Pipeline Overview reports are the first in a series of reports that track pharmaceutical and biotechnology companies worldwide. Further report offerings planned to follow include: Company Detailed Pipeline and Company Competitive Landscape reports. All Cortellis for Competitive Intelligence content is subject to the most comprehensive editorial review process available, conducted by scientists, pharma professionals, regulatory experts, and generics specialists. Featuring timely drug pipeline information expertly uncovered and integrated from a significant number of global meetings each year, you'll always be on top of the latest developments.

Chosen by leading life sciences companies, their executives and investors, *Cortellis for Competitive Intelligence* accelerates your deal-making and gives you timely insights on the development landscape.

Discover undiscovered opportunities in drug development and licensing faster with *Thomson Reuters Cortellis™ for Competitive Intelligence*

DISCLAIMER

The information contained in this report is based on sources believed to be correct but Thomson Reuters does not guarantee the accuracy, timeliness, or completeness of this information. Opinions, if any, are those held by the author of any individual report or article at the time of initial publication and do not necessarily reflect the views of Thomson Reuters.

Information in this report on companies is intended for reference use only, and does not constitute a recommendation to buy or sell any particular security or other investment and does not constitute an offer to buy from or sell to any particular investor. Any company or securities mentioned in this report may not be suitable for any particular investor, depending on that investor's financial position and needs.



GLOSSARY

Number of Drugs in Active Development

Number of drugs associated with the company or subsidiary that are currently in active development, i.e. the development status for the drug(s) is one of the following: Discovery, Clinical, Phase II, Phase III, Pre-registration, Registered, Launched, or Suspended.

Number of Inactive Drugs

Number of drugs associated with the company or subsidiary that are currently classified as inactive, i.e. where the development status for the drug(s) is one of the following: No Development Reported, Discontinued, or Withdrawn.

Number of Patents as Owner

Number of patents associated with the company where the company is listed as owner; i.e. the relationship type (or way the patent refers to the company) is: Patent Assignee/Owner, Patent owner (not assignee), Licensee for development and marketing, Licensee – marketing only (Distributor), Patent assignee of family member, Inferred assignee.

Number of Patents as Third Party

Number of patents associated with the company where the company is listed as third party; i.e. the relationship type (or way the patent refers to the company) is: Patent assignee (not owner), Ex-Licensee for development and marketing, Ex-Licensee marketing only (Distributor), Customer of technology, Ex-Customer of technology, Patent opponent or infringer, Affiliate organization of inventor, Owner of underlying technology.

Patents summary table

This table represents a summary of the core patent coverage for this company covering Therapeutic EP, US and WO patents since 1990 only.

Number of Deals

A count of deals where the company or one of its subsidiaries is the primary company.

Key Indications

Displays top ten key indications for the company and its subsidiaries based on frequency (indications occurring with high and identical frequency are always included, and this may result in more than ten Key Indications being listed). Includes both indications associated with patents where the company is patent owner and indications associated with drugs in active development. A drug is classified as 'active' if it features on a row (or rows) in the current development status table where the status is one of the following: Discovery, Clinical, Phase I, Phase II, Phase III, Pre-registration, Registered, Launched, or Suspended.

Key Target-based Actions

Displays top ten key target-based actions for the company and its subsidiaries based on frequency (actions occurring with high and identical frequency are always included, and this may result in more than ten Key Target-based Actions being listed). Includes both target-based actions associated with patents where the company patent owner and target-based actions associated with drugs in active development. A drug is classified as 'active' if it features on a row (or rows) in the current development status table where the status is one of the following: Discovery, Clinical, Phase I, Phase II, Phase III, Pre-registration, Registered, Launched, or Suspended. A target-based action is one that is associated with a target.

Key Technologies

Displays top ten key technologies for the company and its subsidiaries based on frequency (technologies occurring with high and identical frequency are always included, and this may result in more than ten Key Technologies being listed). Includes both key technologies associated with patents where the company relationship is patent owner and key technologies associated with drugs in active development. A drug is classified as 'active' if it features on a row (or rows) in the current development status table where the status is one of the following: Discovery, Clinical, Phase I, Phase II, Phase III, Pre-registration, Registered, Launched, or Suspended.

THOMSON REUTERS

PLEASE NOTE: the financials section where present in the report includes: Share Information, Stock Performance chart (including the consensus recommendation), and Major Shareholders. Financial Performance presents graphical and tabular data on Worldwide Sales, Operating Income and Net Income over time, together with a Quarterly earnings update. Balance Sheet lists Assets, Liabilities and Stockholders Equity, and Forecasts includes: EPS Forecast and Other Forecasts. The data reported in all sections (except share information and major stock holders) are correct as of the publication date of the report (and not the download date). For share information and major stock holders the data is correct for the date shown with these sections



TABLE OF CONTENTS

Company Overview	7
Company Profile	7
Company Financials	8
Product Portfolio Summary	12
Product Portfolio Drugs	16



Immune Design Corp

COMPANY OVERVIEW

Company Name	Immune Design Corp
Parent Company Name	Immune Design Corp
Website	http://www.immunedesign.com/
Country	US
Number of Drugs in Active Development	9
Number of Inactive Drugs	2
Number of Patents as Owner	12
Number of Patents as Third Party	0
Number of Deals	16
Key Indications	Cancer, HSV-2 infection, Food hypersensitivity, SARS coronavirus infection, Solid tumor, Vaccination, Colon tumor, Merkel cell carcinoma, Prostate tumor, Viral infection
Key Target-based Actions	TLR-4 agonist,T-cell surface glycoprotein CD8 stimulator,Cancer testis antigen NY-ESO-1 inhibitor,Cancer testis antigen NY-ESO-1 modulator,TLR-4 antagonist,Carbonic anhydrase-IX stimulator,Glutamate carboxypeptidase II stimulator,HIV GAG protein stimulator,Hemagglutinin stimulator,Homeobox protein Nkx 3.1 stimulator,Prostate specific antigen stimulator,Prostatic acid phosphatase stimulator,Rev protein stimulator,TLR agonist,Viral envelope glycoprotein stimulator
Key Technologies	Biological therapeutic, Parenteral formulation unspecified, Virus recombinant, Systemic formulation unspecified, Drug combination, Intradermal formulation, Intramuscular formulation, Intratumoral formulation, Antigen, Lipid, Liquid formulation

COMPANY PROFILE

SUMMARY

Immune Design, founded in 2008, a spin-off of California Institute of Technology, aims to develop prophylactic and therapeutic vaccines for infectious diseases, cancer, allergy and autoimmune disorders. The company has identified improved adjuvants and novel technologies targeting and controlling dendritic cells.

In April 2014, the Paris Commercial Court found, among other things, that Henogen SA had breached its contractual obligations to THERAVECTYS by making lentiviral vectors for Immune Design Corp (IDC). In July 2014, THERAVECTYS filed a lawsuit against IDC in the Delaware Court of Chancery, to seek preliminary and permanent injunctive relief, and also monetary damages. THERAVECTYS raised claims of tortious interference with contractual relations, misappropriation of trade secrets, unfair competition and unjust enrichment, by manufacture of lentiviral vectors for IDC by Henogen.

COMPANY LOCATION

The company is headquartered in Seattle, WA.

By October 2013, the company had expanded operations to include a San Francisco office with plans to further expand in the Bay Area.

LICENSING AGREEMENTS

In November 2008, the Immune Design Corp was granted a license to the Infectious Disease Research Institute (IDRI)'s Glycopyranosyl Lipid Adjuvant (GLA) technology, for combination with undisclosed therapeutic vaccine products in a number of indications. IDRI would retain worldwide exclusive rights to develop the technology for products against certain indications, including infectious disease, in the developing world, and would retain rights to develop the technology non-commercially for provision to not-for-profit organizations. Immune Design concurrently established its Global Access Plan, to provide better access to GLA-formulated products for diseases in the developing world.



FINANCIAL

In April 2015, the company priced an underwritten public offering of 3 million common stock shares at a price of \$26.50 per share to raise gross proceeds of approximately \$79.5 million. The underwriters were granted a 30-day option to purchase up to 450,000 additional shares of common stock at the offering price. The offering was expected to close on April 21, 2015.

In October 2014, the company was added to the Russell 2000 Index.

In July 2014, immune design planned to raise \$60 million from an initial offering of 5,000,000 shares, priced at \$12 per share. The company also granted the underwriters a 30-day option to purchase up to 750,000 additional shares of common stock. At that time, the offering was expected to close on July 29, 2014. The shares had begun trading on the NASDAQ Global Market under the symbol "IMDZ". Later in July 2014, the company raised gross proceeds of \$60 million from the closed offering.

In October 2013, the company raised \$49 million in a series C financing which included an upfront investment of \$32.5 million, with an additional investment of \$16.5 million.

In July 2010, Immune Design secured \$32 million in series B financing.

In June 2008, Immune Design raised \$18 million in series A financing.

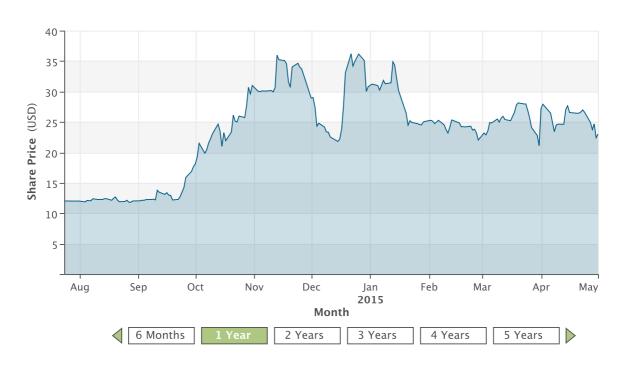
COMPANY FINANCIALS

SHARE INFORMATION

Close Price (USD)	23.00
Change (USD)	0.57 (2.54%)
Previous Close Price (USD)	22.43
Volume	153,995
52-Week High (USD)	40.13
52-Week Low (USD)	11.51
Date	01-May-2015
Exchange	NASDAQ(COMPOSITE)
Current Number of Shares Outstanding	16,979,688
Current Market Capitalization	450,980,513
EPS (Date Reported)	-4.55663



Stock Performance

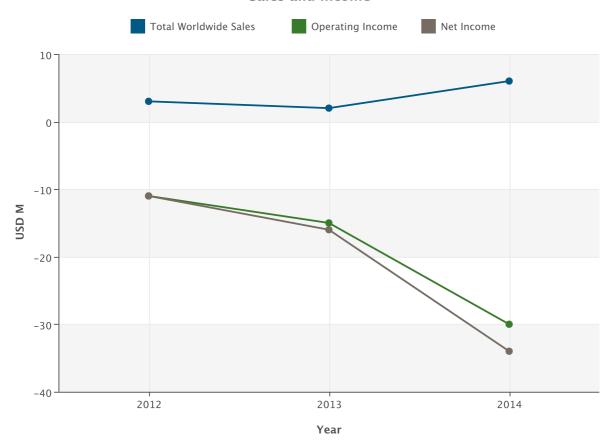


MAJOR SHAREHOLDERS

Shareholder	Туре	Country	Shares held	% of shares held	Change in holding	% changes in shares held	Date
The Column Group LP	Venture Capital	United States	3,161,942	15.91	0	0	21-Apr-2015
ProQuest Associates IV LLC	Investme nt Advisor	United States	2,161,465	10.87	-534,292	-0.2	27-Apr-2015
Berger (Franklin M)	Individua I Investor	United States	75,000	0.38	25,000	0.5	21-Apr-2015
Coleman (Lewis W)	Individua I Investor	United States	10,000	0.05	10,000	1	21-Apr-2015



Sales and Income



	2012	2013	2014	
Sales (USD M)	2.96	1.599	6.433	
Operating Income (USD M)	-10.875	-15.057	-29.878	
Net Income (USD M)	-10.84	-15.975	-34.151	



Quarterly earnings update

Period	Sales (USD M)	Operating Income (USD M)	Net Income (USD M)
2014 Q4	1.8	-13.121	-13.12
2014 Q3	3.544	-6.557	-6.682
2014 Q2	1.064	-4.687	-6.126
2014 Q1	0.025	-5.513	-8.223
2013 Q3	0.129	-3.993	-3.994
2013 Q2	0.882	-3.638	-3.634
2013 Q1	0.564	-2.972	-2.941

BALANCE SHEET

Assets (USD M)

	2012	2013	2014	
Cash & Short Term Investments	12.762	30.387	75.354	
Inventories - Total	0.252	0.017	0.025	
Current Assets - Total	13.714	30.67	77.982	
Property, Plant And Equipment - Net	0.538	0.295	0.401	
Other Assets - Total	0	0	0	
Total Assets	14.252	30.965	78.383	

Liabilities (USD M)

	2012	2013	2014	
Accounts Payable	1.079	0.866	6.903	
Short Term Debt & Current Portion Of Long Term Debt	0	0	0	
Current Liabilities - Total	2.646	1.975	11.947	
Long Term Debt	0	0	0	
Other Liabilities	0	3.43	0.09	
Total Liabilities	2.646	5.405	12.037	



Stockholders Equity (USD M)

	2012	2013	2014	
Minority Interest	0	0	0	
Preferred Stock	52	84.3	0	
Common Stock	0.003	0.003	0.017	
Treasury Stock		0		
Total Liabilities & Shareholders' Equity	14.252	30.965	78.383	

FORECASTS

EPS Forecast

Year ending	Current Forecast	1 month ago	3 months ago
31-Dec-2015	-2.5	-2.35	-2.35
31-Dec-2016	-2.75	-1.92	-1.92
31-Dec-2017	-3.06	-2.7	-2.7

Other Forecasts

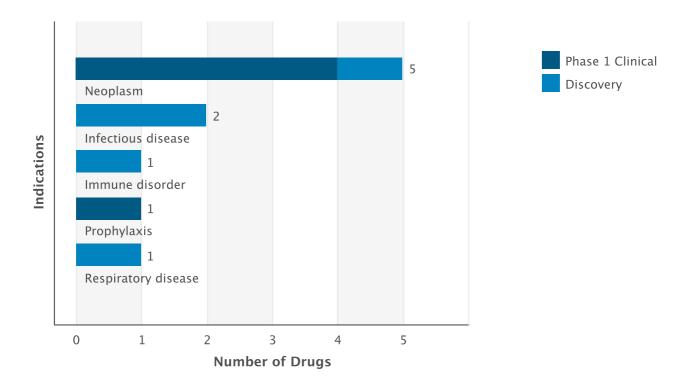
Year ending	DPS	CPS	Pretax	Sales
31-Dec-2015			-44.04	5.2
31-Dec-2016			-52.24	5.2
31-Dec-2017			-85.01	5.22

PRODUCT PORTFOLIO SUMMARY

DRUGS

Drugs by Indication

Active Drugs by Indication Chart

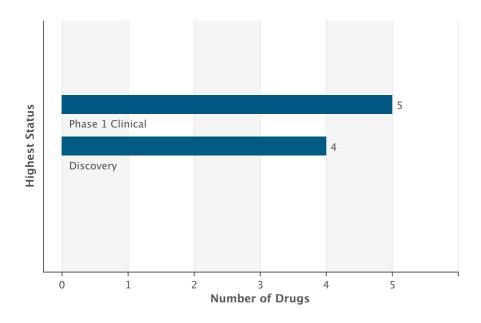


Drugs by Indication Table

Indication	Active	Inactive	Total
Neoplasm	5	0	5
Infectious disease	2	2	4
Respiratory disease	1	2	3
Prophylaxis	1	1	2
Immune disorder	1	0	1

Drugs by Highest Status

Active Drugs by Highest Status Chart



Drugs by Highest Status Table

Development Status	Number of Drugs
Phase 1 Clinical	5
Discovery	4
No Development Reported	2

DEALS

Deal Type	Prin	cipal	Par	tner	Total
	Active	Inactive	Active	Inactive	
Technology - Other Proprietary	1	0	0	0	1
Drug - Early Research/Development	1	0	0	0	1
Drug - Development/Commercialization License	5	0	1	0	6
Drug - Development Services	0	0	6	0	6
Technology - Delivery/Formulation	1	0	1	0	2

CLINICAL TRIALS



Trials by Condition Studied

Condition Studied	Ongoing	All
Neoplasm	4	6
Dermatological disease	2	3
Endocrine disease	2	2
Gynecology and obstetrics	2	2
Genitourinary disease	2	2
Respiratory disease	2	2
Musculoskeletal disease	1	1

Trials by Phase

Phase	Ongoing	All
Phase 2	0	1
Phase 1	4	6

Phase Definitions

Phase 3 Clinical

Includes Phase 3, Phase 3b, Phase 3a, Phase 2/3 (where enrolment count is 300 or over)

Phase 2 Clinical

Includes Phase 2, Phase 2a, Phase 2b, Phase 1/2 (where enrolment count is 100 or over), Phase 2/3 (where enrolment count is under 300 or not specified)

Phase 1 Clinical

Includes Phase 1, Phase 1a, Phase 1, Phase 1/2 (where enrolment count is under 100 or not specified), Phase 0

PATENTS *

Indication	As Owner	As Third Party	Total
Endocrine disease	1	0	1
Gastrointestinal disease	1	0	1
Genitourinary disease	1	0	1
Andrology	1	0	1
Immune disorder	4	0	4
Psychiatric disorder	1	0	1
Neoplasm	8	0	8
Neurological disease	1	0	1



Respiratory disease	4	0	4
Infectious disease	11	0	11
Toxicity and intoxication	1	0	1
Inflammatory disease	1	0	1
Otorhinolaryngological disease	1	0	1
Gynecology and obstetrics	1	0	1
Dermatological disease	1	0	1

^{*} This table represents a summary of the core patent coverage for this company covering Therapeutic EP, US and WO patents since 1990 only.

PRODUCT PORTFOLIO DRUGS

PLEASE NOTE: Highest status refers to highest development of that drug for one of the active companies

glucopyranosyl lipid A adjuvant, Immune Design Corp

Drug Name	glucopyranosyl lipid A adjuvant, Immune Design Corp
Key Synonyms	
Originator Company	Infectious Disease Research Institute
Active Companies	Immune Design Corp
Inactive Companies	Infectious Disease Research Institute
Highest Status	Phase 1 Clinical
Active Indications	Vaccination
Target-based Actions	TLR-4 agonist
Other Actions	Adjuvant, Immunostimulant
Technologies	Systemic formulation unspecified, Small molecule therapeutic
Last Change Date	28-Jan-2015

LV-305

Drug Name	LV-305
Key Synonyms	
Originator Company	Immune Design Corp
Active Companies	Immune Design Corp
Inactive Companies	
Highest Status	Phase 1 Clinical
Active Indications	Cancer
Target-based Actions	Cancer testis antigen NY-ESO-1 inhibitor, T-cell surface glycoprotein CD8 stimulator
Other Actions	Anticancer, Retrovirus based gene therapy, Therapeutic vaccine
Technologies	Virus recombinant, Biological therapeutic, Parenteral formulation unspecified, Intradermal formulation
Last Change Date	28-Apr-2015

G-305

Drug Name	G-305
Key Synonyms	
Originator Company	Immune Design Corp
Active Companies	Immune Design Corp
Inactive Companies	
Highest Status	Phase 1 Clinical
Active Indications	Cancer
Target-based Actions	TLR-4 agonist
Other Actions	Anticancer, Therapeutic vaccine
Technologies	Intramuscular formulation, Biological therapeutic
Last Change Date	01-Apr-2015

CMB-305

Drug Name	CMB-305
Key Synonyms	
Originator Company	Immune Design Corp
Active Companies	Immune Design Corp
Inactive Companies	
Highest Status	Phase 1 Clinical
Active Indications	Solid tumor
Target-based Actions	Cancer testis antigen NY-ESO-1 modulator, T-cell surface glycoprotein CD8 stimulator, TLR-4 agonist
Other Actions	Anticancer, Retrovirus based gene therapy, Therapeutic vaccine
Technologies	Drug combination, Virus recombinant, Biological therapeutic, Parenteral formulation unspecified
Last Change Date	01-Apr-2015

G-100, Immune

Drug Name	G-100, Immune
Key Synonyms	
Originator Company	Immune Design Corp
Active Companies	Immune Design Corp
Inactive Companies	
Highest Status	Phase 1 Clinical
Active Indications	Cancer
Target-based Actions	TLR-4 agonist
Other Actions	Anticancer, Therapeutic vaccine
Technologies	Intratumoral formulation, Biological therapeutic
Last Change Date	01-Apr-2015

IDC-G103

Drug Name	IDC-G103
Key Synonyms	
Originator Company	Immune Design Corp
Active Companies	Immune Design Corp
Inactive Companies	
Highest Status	Discovery
Active Indications	HSV-2 infection
Target-based Actions	TLR-4 agonist
Other Actions	Therapeutic vaccine, Antiviral
Technologies	Biological therapeutic, Parenteral formulation unspecified
Last Change Date	22-Apr-2014

therapeutic vaccine (GLA adjuvanted, allergy), Sanofi/Immune Design

Drug Name	therapeutic vaccine (GLA adjuvanted, allergy), Sanofi/Immune Design
Key Synonyms	
Originator Company	Immune Design Corp
Active Companies	Immune Design Corp, Sanofi
Inactive Companies	
Highest Status	Discovery
Active Indications	Food hypersensitivity
Target-based Actions	TLR-4 agonist
Other Actions	Immunomodulator, Therapeutic vaccine
Technologies	Systemic formulation unspecified, Biological therapeutic
Last Change Date	29-Aug-2014

checkpoint inhibitors (LV-305 +/-GLA, cancer), Immune Design

Drug Name	checkpoint inhibitors (LV-305 +/-GLA, cancer), Immune Design
Key Synonyms	
Originator Company	Immune Design Corp
Active Companies	Immune Design Corp
Inactive Companies	
Highest Status	Discovery
Active Indications	Cancer
Target-based Actions	TLR-4 agonist
Other Actions	Retrovirus based gene therapy, Anticancer, Therapeutic vaccine, Immunostimulant
Technologies	Virus recombinant, Biological therapeutic, Parenteral formulation unspecified
Last Change Date	05-Feb-2015



RBD-S SARS vaccine (SARS), Sabin Vaccine Institute/Baylor College of Medicine/Immune Design Corporation/Walter Reed Army Institute of Research

Drug Name	RBD-S SARS vaccine (SARS), Sabin Vaccine Institute/Baylor College of Medicine/Immune Design Corporation/Walter Reed Army Institute of Research
Key Synonyms	
Originator Company	Baylor College of Medicine
Active Companies	Immune Design Corp, Sabin Vaccine Institute, Baylor College of Medicine, Walter Reed Army Institute of Research
Inactive Companies	
Highest Status	Discovery
Active Indications	SARS coronavirus infection
Target-based Actions	
Other Actions	Protein subunit vaccine, Prophylactic vaccine
Technologies	Biological therapeutic, Parenteral formulation unspecified, Protein recombinant
Last Change Date	15-Nov-2014



This report was created by Thomson Reuters, using information from *Thomson Reuters Cortellis*™ *for Competitive Intelligence*; a comprehensive, proven intelligence solution that leverages the most accurate, complete, and widely respected drug pipeline information.

For more information about *Cortellis for Competitive Intelligence*, visit: http://cortellis.thomsonreuters.com/cortellis_for_you/?cid=thomsonone.

For subscription information, e-mail scientific.lifesciences@thomsonreuters.com.

© 2012 Thomson Reuters. All rights reserved. Republication or redistribution of Thomson Reuters content, including by framing or similar means, is prohibited without the prior written consent of Thomson Reuters. 'Thomson Reuters' and the Thomson Reuters logo are registered trademarks and trademarks of Thomson Reuters and its affiliated companies.

THOMSON REUTERS