

Intracellular Targets made druggable by TCR-like Antibodies, TCR Fusion Proteins & Cell-Penetrating Biologics 2018: an industry analysis of technologies, stakeholders, deals & trends

<https://marketpublishers.com/r/IED598E74D3EN.html>

Date: January 2018

Pages: 252

Price: US\$ 2,800.00 (Single User License)

ID: IED598E74D3EN

Abstracts

It is estimated that there are 3-4 times more intracellular targets than surface protein targets. However, these intracellular cancer targets are not accessible to traditional monoclonal antibody (mAb) therapies. Since many of these targets are not enzymes or surface receptors with readily druggable pockets, these important oncogenic proteins cannot be easily inhibited with small molecules. Thus, intracellular cancer-specific proteins, such as mutated oncogene products, transcription factors, protein adapters, and other nontraditional targets, remain inaccessible to current technologies used for FDA-approved drugs.

Therefore, novel technologies are needed to address historically undruggable targets and complex mechanisms, such as intracellular protein-protein interactions like p53 or Ras, β -catenin and Myc.

This report „Intracellular Targets made druggable by TCR-like Antibodies, TCR Fusion Proteins & Cell-Penetrating Biologics 2018: an industry analysis of technologies, stakeholders, deals & trends“ brings you up-to-date regarding key technologies

for identification and validation of intracellular targets,

for generation of T-cell receptors (TCR) and TCR fusion proteins,

for discovery of TCR-like antibodies, and

for construction of cell-penetrating peptides, proteins and antibodies.

The report furthermore describes the profiles of leading product candidates created by these technologies. The technology companies are presented and analyzed. Deals between Big Pharma and technology companies as well as collaboration and licensing deals between technology companies are highlighted. The value of technologies and product candidates are discussed regarding company acquisition prices, economic deal terms and financing rounds.

What will you find in the report?

Description and comparison of technologies for

Discovery and validation of intracellular targets;

Discovery and optimization of T-Cell Receptors (TCRs);

Generation of TCR-like or TCR-mimic antibodies;

Generation of TCR fusion proteins

Generation of cell-penetrating peptides, proteins and antibodies.

Presentation and discussion of profiles of selected product candidates:

TCRL antibodies and TCR fusion proteins; and

Cell-penetrating peptides, miniproteins and single domain and Ig antibodies

Stakeholder analysis based on profiles of 45 companies active in the field
Analysis of partnering deals and financing rounds

Contents

1 EXECUTIVE SUMMARY

2 INTRODUCTION & OVERVIEW

3 BACKGROUND

4 TECHNOLOGY PROFILES

4.1 Overview & Discussion

4.1.1 Intracellular Target Discovery

4.1.2 TCR Discovery Technologies

4.1.3 Generation of TCR-like Antibodies

4.1.4 Generation of TCR Fusion Proteins against Intracellular Targets

4.1.5 Generation of Cell Penetrating Biologics against Intracellular Targets

4.2 Technologies for Discovery of Intracellular Targets

4.2.1 XPRESIDENT

4.2.2 Targets for TCRs (Immunocore)

4.2.3 Phosphopeptide Library

4.2.4 HTS Platform for Neoantigen Identification

4.2.5 ECLIPSE Platform

4.2.6 EpiTarget Platform

4.2.7 Soluble HLA (sHLA) Molecules

4.2.8 Phagemers & SSIp display

4.2.9 Peptide/MHC Complexes

4.2.10 TCR Target Discovery

4.3 Technologies for Discovery of TCRs

4.3.1 Naturally Selected TCRs

4.3.2 TCRs by ImmTAC Technology

4.3.3 HTS for TUMAP-Restricted TCRs

4.3.4 Natural TCR Library

4.3.5 Sleeping-Beauty Expression System

4.3.6 TCR-GENerator

4.3.7 T-Rx Mammalian TCR Display

4.3.8 Single Cell Sequencing Platform

4.3.9 Immune Repertoire Capture

4.3.10 Combinatorial TCR Exchange (CTE)

4.3.11 VelociT for T-Cell Receptor Discovery

4.4 Technologies for Generation of TCRL Antibodies

- 4.4.1 TandAb
- 4.4.2 BiTE
- 4.4.3 E-Alpha Phage Display
- 4.4.4 HuTARG Protein Engineering
- 4.4.5 MAR & TriTE
- 4.4.6 TCRL Antibodies
- 4.4.7 TCRm Antibodies
- 4.4.8 Ylanthia Fab library
- 4.4.9 TCRL ADCs

4.5 Technologies for Generation of TCR Fusion Proteins

- 4.5.1 ImmTAC
- 4.5.2 TCR Bispecifics
- 4.5.3 STAR

4.6 Technologies for Generation of Cell Penetrating Biologics

- 4.6.1 Cell-Penetrating alpha Bodies
- 4.6.2 Anti-DNA Autoantibodies
- 4.6.3 Cell Penetrating Mini Proteins (CPMP)
- 4.6.4 Feldan Shuttle
- 4.6.5 Shark VNARs
- 4.6.6 iMab
- 4.6.7 iTABs
- 4.6.8 Stapled Peptides
- 4.6.9 Single Domain Antibodies

5 PIPELINE ANALYSIS AND PRODUCT PROFILES

5.1 Overview Product Profiles and Pipeline Discussion

5.2 Profiles of Selected TCRL Antibodies & TCR Fusion Proteins

- 5.2.1 IMCgp100
- 5.2.2 ALT-801
- 5.2.3 H8F4
- 5.2.4 MMP1-003 TandAb
- 5.2.5 ESK1 & ESKM
- 5.2.6 RL1B

5.3 Profiles of Selected Cell Penetrating Peptides, Proteins & Antibodies

- 5.3.1 ALRN-6924
- 5.3.2 Anti-Mcl-1 CPAB
- 5.3.3 PAT-DX1 & Other Deoxymabs

- 5.3.4 RT11-i
- 5.3.5 SBT-100

6 STAKEHOLDER ANALYSIS & COMPANY PROFILES

- 6.1 Stakeholder Analysis and Overview of Company Profiles
- 6.2 Profiles of Companies with Target Discovery and TCR Fusion Protein Technologies
 - 6.2.1 Agenus
 - 6.2.2 Atreca
 - 6.2.3 Immatix Biotechnologies
 - 6.2.4 Immunocore
 - 6.2.5 Regeneron Pharmaceuticals
- 6.3 Profiles of Companies with Target Discovery and TCR-Like Antibody Technologies
 - 6.3.1 AbeXXa
 - 6.3.2 Adicet Bio
 - 6.3.3 MD Anderson Cancer Center
 - 6.3.4 Pure MHC
- 6.4 Profiles of Companies with TCR Fusion Protein and/or TCRL Antibody Technologies
 - 6.4.1 Affimed Therapeutics
 - 6.4.2 NantCell
(Altor Bioscience)
 - 6.4.3 Eureka Therapeutics
 - 6.4.4 Innovative Targeting Solutions (ITS)
 - 6.4.5 Morphosys
 - 6.4.6 Receptor Logic (now Pure MHC)
 - 6.4.7 Timmune Biotech
- 6.5 Profiles of Companies with TCR Discovery Technologies only used for T-Cell Therapy
 - 6.5.1 BioNTech
 - 6.5.2 Gadeta
 - 6.5.3 Gilead Sciences (Kite Pharma)
 - 6.5.4 Juno Therapeutics
 - 6.5.5 Medigene
 - 6.5.6 ZIOPHARM Oncology
- 6.6 Profiles of Companies with Cell Penetrating (CP) Peptide, Protein or Antibody Technologies
 - 6.6.1 Aileron Therapeutics
 - 6.6.2 Complix
 - 6.6.3 Elasmogen

- 6.6.4 Feldan Therapeutics
- 6.6.5 Fog Pharmaceuticals
- 6.6.6 Orum Pharmaceuticals
- 6.6.7 Patrys
- 6.6.8 Singh Biotechnology
- 6.6.9 Sorrento Therapeutics & LA Cell

6.7 Profiles of Big Pharma & Biotech Companies Active in the Intracellular Target and TCR & Cell Penetrating Biologics Field

- 6.7.1 AbbVie
- 6.7.2 Amgen
- 6.7.3 Astellas Pharma
- 6.7.4 AstraZeneca
- 6.7.5 Boehringer Ingelheim
- 6.7.6 Eli Lilly
- 6.7.7 GlaxoSmith-Kline
- 6.7.8 Janssen Biotech
- 6.7.9 Merck
- 6.7.10 Novartis
- 6.7.11 Roche

6.8 Profiles of Other Companies with Stakes in the Field of Intracellular Targets and TCR & Cell Penetrating Biologics

- 6.8.1 Nextera
- 6.8.2 Xencor
- 6.8.3 Zymeworks

7 DEALS & FINANCING

- 7.1 Partnering Deals between Big Pharma and Technology Companies
- 7.2 Acquisitions of Technology Companies
- 7.3 Collaboration and Licensing Deals between Technology Companies
- 7.4 Financing Sources of Technology Companies

8 TRENDS & OUTLOOK

10 REFERENCES

Tables

TABLES IN THE REPORT

Overview of Corporate Technologies to Discover Intracellular Targets for TCRs
Overview of Corporate Technologies to Discover Therapeutic TCRs
Overview of Technologies for Generation of TCRL Antibodies against Intracellular Targets
Overview of Technologies for Generation of TCR Fusion Proteins against Intracellular Targets
Overview of Technologies for Generation of Cell Penetrating Biologics against Intracellular Targets
Affinity Enhancement of TCRs by Immunocore technology
Examples of Direct Identification and Confirmation of Class I MHC-Peptide Epitopes on Cells with T-Cell Receptor Mimic Antibodies
Profiles of Selected TCRL Antibodies & TCR Fusion Proteins
Profiles of Selected Cell Penetrating Peptides, Proteins & Antibodies
Clinical Studies with IMCgp100
Profiles of Companies with Target Discovery and TCR Fusion Protein Technologies
Profiles of Companies with Target Discovery and TCR-Like Antibody Technologies
Profiles of Companies with TCR Fusion Protein and/or TCRL Antibody Technologies
Profiles of Companies with TCR Discovery Technologies only used for T-Cell Therapy
Profiles of Companies with Cell Penetrating (CP) Peptide, Protein or Antibody Technologies
Profiles of Big Pharma & Biotech Companies Active in the Intracellular Target and TCR & Cell Penetrating Biologics Field
Profiles of Other Companies with Stakes in the Field of Intracellular Targets and TCR & Cell Penetrating Biologics
Antibody-based immunotherapeutics against pMHCs* discovered by immatics' XPRESIDENT technology
Immunocore's Proprietary and Partnered Pipeline of TCR Fusion Proteins
Goals and Terms of Immunocore's Partnering Deals for ImmTAC Technology
Innovative Targeting Solutions and Drug Candidates from HuTARG Platform
Examples of Direct Identification and Confirmation of Class I MHC-Peptide Epitopes on Cells with T-Cell Receptor Mimic Antibodies
Pipeline sdAbs from Singh Biotechnology
Collaboration and Licensing Agreements between Big Pharma/Biotech and Technology Companies for Intracellular Targets and Therapeutic Biologics
Acquisition of Technology Companies in the Field

Collaboration and Licensing Agreements between Technology Companies Financing Sources of Technology Companies in the Field

COMPANIES MENTIONED IN THE REPORT

AbbVie
AbeXXa Biologics
Adicet Bio (Applied Immune Technologies)
Affimed Therapeutics
Agenus
Aileron Therapeutics
Amgen
Astellas Pharma
AstraZeneca
Atreca
BioNTech
Boehringer Ingelheim
Complix
Elasmogen
Eli Lilly
Eureka Therapeutics
Feldan Therapeutics
Fog Pharmaceuticals
Gadeta
Gilead Sciences (Kite Pharma)
GlaxoSmith-Kline
Immatics Biotechnologies
Immunocore
Innovative Targeting Solutions (ITS)
Janssen Biotech
Juno Therapeutics
MD Anderson Cancer Center
Medigene
Merck
Morphosys
NantCell (Altor Bioscience)
Nextera
Novartis
Orum Pharmaceuticals

Patrys
Pure MHC
Pure MHC
Receptor Logic (now Pure MHC)
Regeneron Pharmaceuticals
Roche
Singh Biotechnology
Sorrento Therapeutics & LA Cell
Timmune Biotech
Xencor
ZIOPHARM Oncology
Zymeworks

I would like to order

Product name: Intracellular Targets made druggable by TCR-like Antibodies, TCR Fusion Proteins & Cell-Penetrating Biologics 2018: an industry analysis of technologies, stakeholders, deals & trends

Product link: <https://marketpublishers.com/r/IED598E74D3EN.html>

Price: US\$ 2,800.00 (Single User License / Electronic Delivery)

If you want to order Corporate License or Hard Copy, please, contact our Customer Service:

info@marketpublishers.com

Payment

To pay by Credit Card (Visa, MasterCard, American Express, PayPal), please, click button on product page <https://marketpublishers.com/r/IED598E74D3EN.html>

To pay by Wire Transfer, please, fill in your contact details in the form below:

First name:
Last name:
Email:
Company:
Address:
City:
Zip code:
Country:
Tel:
Fax:
Your message:

****All fields are required**

Customer signature _____

Please, note that by ordering from marketpublishers.com you are agreeing to our Terms & Conditions at <https://marketpublishers.com/docs/terms.html>

To place an order via fax simply print this form, fill in the information below

and fax the completed form to +44 20 7900 3970