



Pioneering science delivers vital medicines™

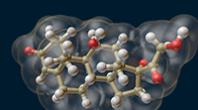
2015 Bioinformatics Get-Together

Jacob Justus – Manager, Clinical Applications & Analytical Services

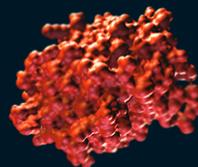
Amgen – The Science

the Shape OF DRUGS TO COME

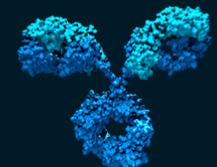
Protein engineers are using the building blocks nature provides to design an ever-expanding toolkit of new drug modalities to fight disease.



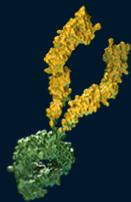
SMALL MOLECULES



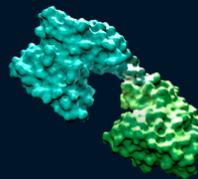
THERAPEUTIC PROTEINS



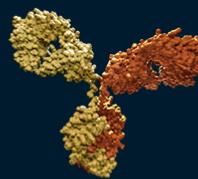
MONOCLONAL ANTIBODIES



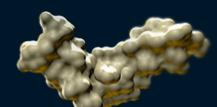
FUSION PROTEINS



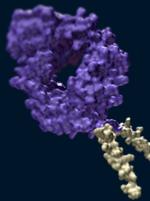
BITE® ANTIBODY CONSTRUCTS



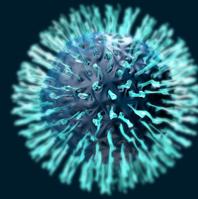
BISPECIFIC ANTIBODIES



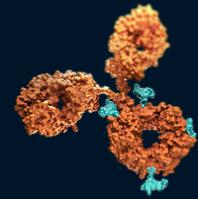
PEPTIDES



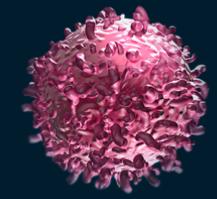
PEPTIBODIES



ONCOLYTIC IMMUNOTHERAPY VIRUSES



ANTIBODY DRUG CONJUGATES



CAR T CELLS

Amgen - FIBCO

Pipeline

19 targets supported by
GENETIC VALIDATION

The industry's largest toolkit with
11 MODALITIES*

A mix of
INNOVATIVE MOLECULES, POTENTIAL NEW INDICATIONS, AND BIOSIMILARS

A robust and differentiated pipeline, leveraging state-of-the-art science to create medicines for serious illness. Amgen is focused on high-quality candidates that demonstrate large, clinically-relevant effects. Human genetic validation is used whenever possible to enhance the likelihood of success.

[Download Pipeline Chart](#)

THERAPEUTIC AREA All +

MODALITY All +

PHASE ONE		
AMG 172	AMG 208	AMG 211
AMG 228	AMG 232	AMG 282
AMG 301	AMG 319	AMG 357
AMG 557	AMG 581	AMG 595
AMG 780	AMG 811	AMG 820
AMG 876	AMG 900	Oprozomib

PHASE TWO		
AMG 139	AMG 157	AMG 181
AMG 334	AMG 337	BLINCYTO® (blinatumomab)
Kyprolis® (carfilzomib)	Omecamtiv mecarbil	Oprozomib
XGEVA® (denosumab)		

PHASE THREE		
AMG 334	Aranesp® (darbeopetin alfa)	BLINCYTO® (blinatumomab)
Etecalcetide (AMG 416)	Kyprolis® (carfilzomib)	Prolia® (denosumab)
Repatha™ (evolocumab)	Romosozumab	Talimogene laherparepvec
Trebananib	Vectibix® (panitumumab)	XGEVA® (denosumab)

BIOSIMILARS†					
ABP 215 (biosimilar bevacizumab)	ABP 404 (biosimilar cetuximab)	ABP 501 (biosimilar adalimumab)	ABP 710 (biosimilar infliximab)	ABP 798 (biosimilar rituximab)	ABP 680 (biosimilar trastuzumab)

R&D - Global Development Operations - CAAS

CAAS Global Organization



Bioinformatics Implementation - Metrics, Reporting, & Spotfire Dashboards

DataScienceforIVMOOC-Spotfire.dxp - TIBCO Spotfire

File Edit View Insert Tools Help

Cover Page VFLC DSDHT Assignment 5 FAERS Statistics

Navigation and Data Sources

Back to Cover Page Data Science for Drug Discovery, Health and Translational Medicine: Assignment 5
Data Source: http://semanticommunity.info/api/deki/files/28917/MQIC_Detailed_Slice.xlsx

MQIC Detailed Slice Data Dictionary

Column	Description	Data table:
YEAR	Year for which the data is aggregated	MQIC Detailed Sli...
STATE	State abbreviation	
AGE_CATEGORY	1 = 18 years to 44 years 2 = 45 to 64 years	

Bar Chart

(Row Count) A1C_MEAN

Data table: MQIC Detailed Sli...
Marking: Marking
Color by: GENDER

Bar Chart

(Row Count) BMI_MEAN

Data table: MQIC Detailed Sli...
Marking: Marking
Color by: GENDER

A1C_MEAN vs. BMI_MEAN

A1C_MEAN BMI_MEAN

Data table: MQIC Detailed Sli...
Marking: Marking
Marker by: (Row Nu...
Color by: DISEASE...

WEIGHT_MEAN vs. BMI_MEAN

WEIGHT_MEAN BMI_MEAN

Data table: MQIC Detailed Sli...
Marking: Marking
Marker by: (Row Nu...
Color by: DISEASE...

MQIC Detailed Slice Data Set

YEAR	STATE	AG...	GENDER	DISE...	PATIEN...	OFFICE...	A1C_ME...	A1C_ME...	A1C_S...	WEIGH...	WEIGH...	WEIG...	BMI_M...	BMI_M...	BMI_S...	BMI_M...	BMI_S...	FBG_ME...	FBG_ME...	FBG...	SBP...
2005	AR	2	Female	1	119	838	7.28	7.00	1.75	217.19	212.00	56.86	36.13	35.61	9.39	161.48	132.00	83.85	131.42		
2005	AR	2	Female	2	123	955	7.10	6.60	1.61	218.33	213.00	53.00	36.29	35.27	8.62	154.42	130.50	74.98	133.17		
2005	AR	3	Female	1	174	1340	6.91	6.80	1.09	189.32	182.75	45.32	32.62	31.66	7.57	145.22	127.00	58.97	134.57		
2005	AR	3	Male	1	140	969	7.11	6.90	1.33	224.36	224.00	44.34	33.39	32.10	7.26	143.58	125.00	61.06	135.93		
2005	AR	3	Male	2	143	985	6.95	6.75	1.31	220.10	218.50	39.70	31.96	31.99	4.80	159.49	138.00	68.90	134.62		
2005	AR	4	Female	1	124	933	6.75	6.60	0.97	162.65	156.70	34.61	28.34	27.12	5.63	137.11	123.00	49.98	138.01		
2005	AR	4	Female	2	129	1005	6.74	6.60	1.06	166.04	158.00	36.72	28.99	27.61	6.08	134.72	122.00	47.73	138.36		
2005	AZ	3	Female	1	419	3858	6.90	6.70	1.01	184.95	180.00	43.04	32.46	31.62	7.15	135.55	125.00	51.70	134.53		

Online 30 of 30 rows | 0 marked | 2 columns | MQIC Detailed Slice Data Dictionary

For illustration of tool, Non-Amgen data, taken from: http://semanticommunity.info/Data_Science/Data_Science_for_VIVO, 2015

