

Development of Reports and Visualisations to Facilitate the Analysis and Transformation of the Clinical Trial Landscape into Actionable Intelligence

II-SDV 2014

AstraZeneca – Jasen Chooramun,
Jeanette Eldridge & So Man

BizInt – Diane Webb, Matt Eberle &
John Willmore



Agenda

- **Generic process**
 - Data Sources
 - Toolkit
- **Clinical Trial Scenarios**
 - Collaborations
 - Mapping Locations
 - US and UK Geocoding
 - Visualising Timelines
- **Data Issues**
- **Wish list**
- **Closing Remarks**



Process



CT.gov

TrialTrove

Smart Charts

VP - Smart Charts
Edition

Process

What are Clinical Trials?

- **Regulated study used to determine whether a treatment or device is safe and effective in humans**
- **In this presentation we have used two sources of Clinical Trial Information:**

ClinicalTrials.gov

Trialtrove



Process Toolkit

- **BizInt Smart Charts for Drug Pipelines**

- Import results from each database and combine

- **BizInt Smart Charts Reference Rows**

- Create a single row and summarize indications for each trial

- **VantagePoint – Smart Charts Edition**

- Normalize phases
- Clean up sponsors
- Create visualization



Clinical Trial Scenarios

Analysis & Visualisation



Collaboration is a way of life across our business



Clinical Trial Collaborations

Background

Can we use clinical trials data to identify potential collaboration opportunities in a particular region?

ClinicalTrials.gov

**“esophageal cancer” OR “oesophageal cancer” OR
“oesophogeal cancer” (703 hits) → Region Name →
Europe [map] → UK (39 hits)**

Citeline TrialTrove

Oncology → Esophageal → Location:UK (185 hits)



703 studies found for: "esophageal cancer" OR "esophogeal cancer" OR "oesophageal cancer"

[Modify this search](#) | [How to Use Search Results](#)

List

By Topic

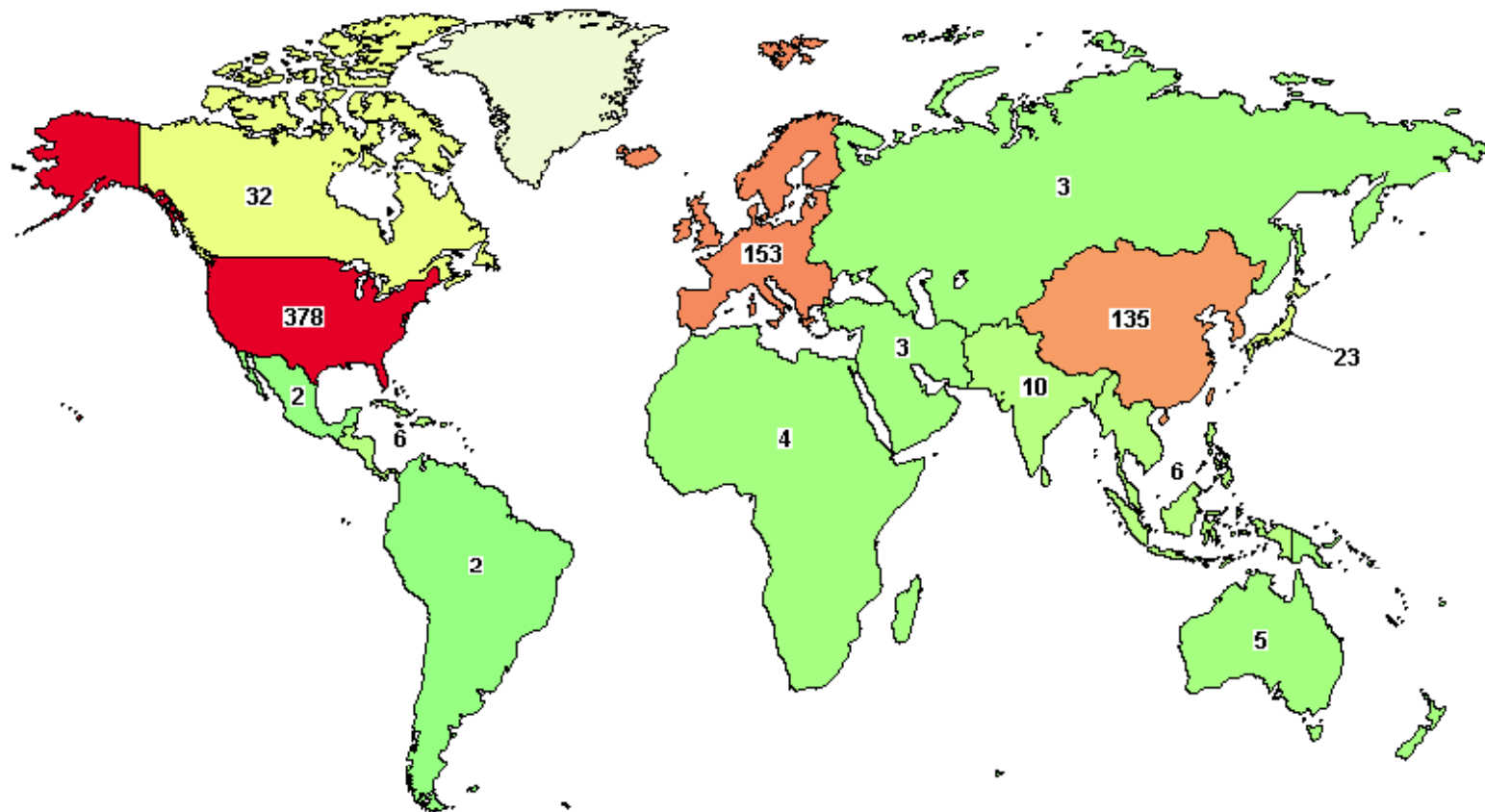
On a Map

Search Details

703 studies found, shown on map.

A similar map is available for all studies in [ClinicalTrials.gov](#)

Click on the map below to show a more detailed map (when available) or search for studies (when map not available).



Colors indicate number of studies with locations in that region

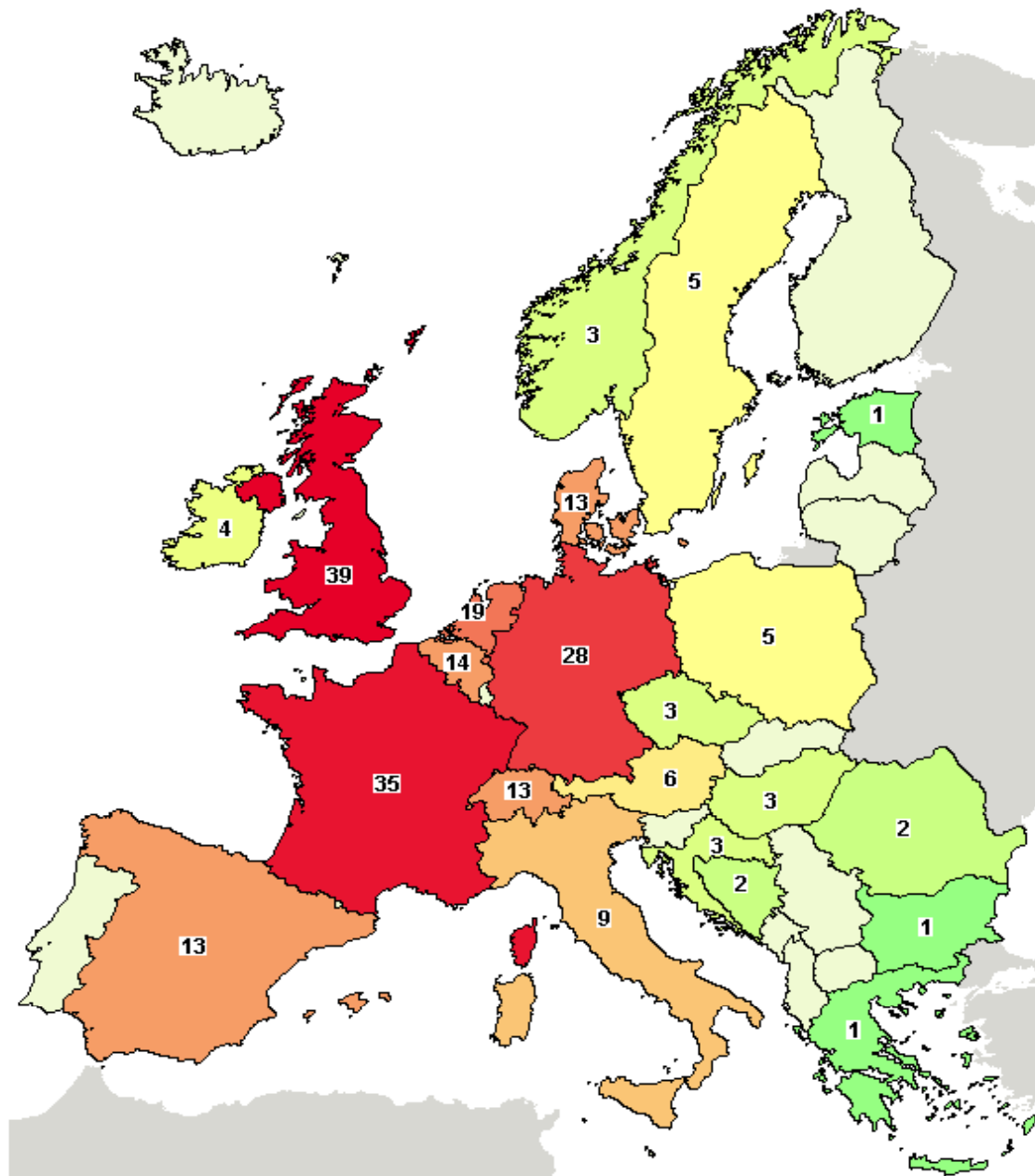
Least  Most

Labels give exact study count

703 studies found, shown on map.

A similar map is available for all studies in ClinicalTrials.gov

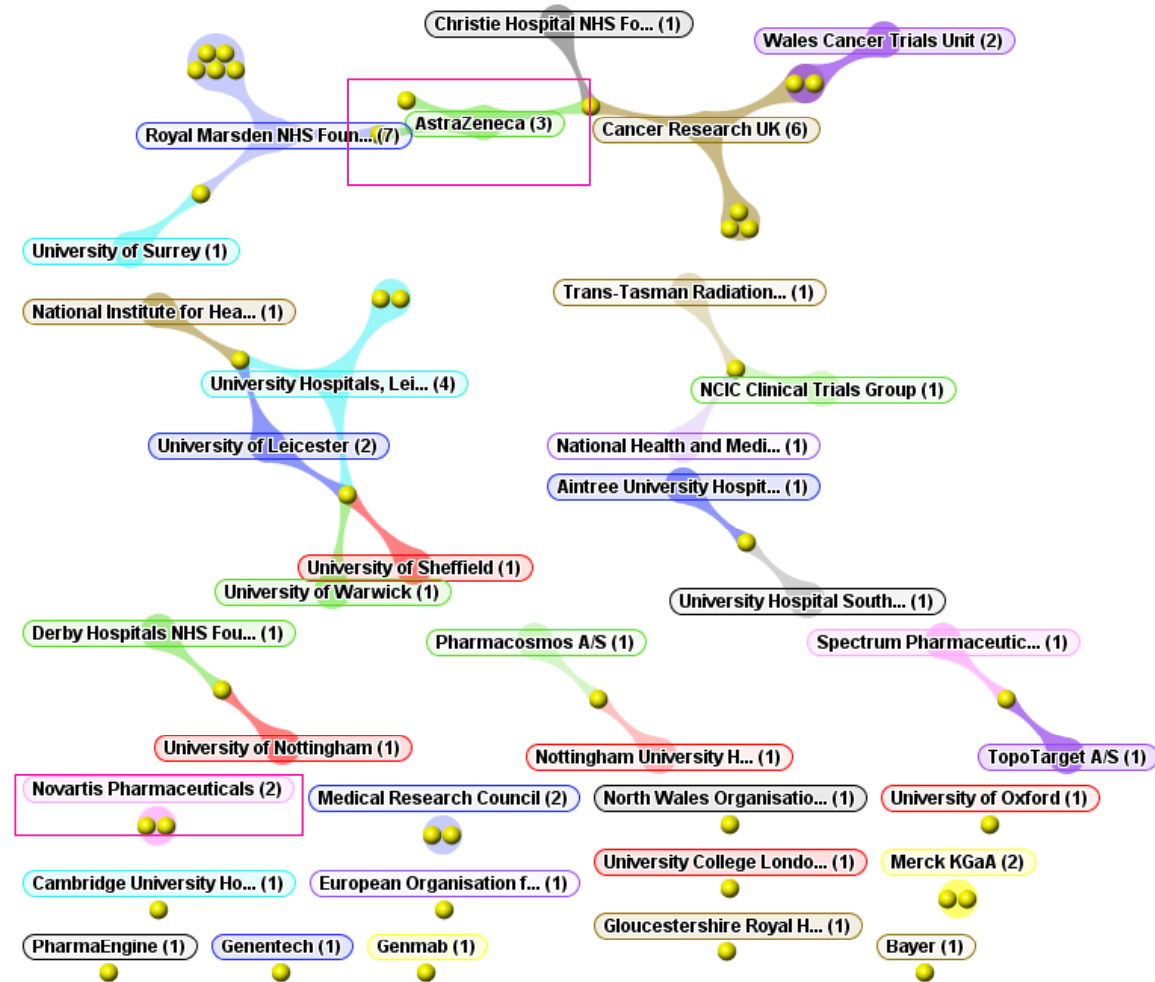
Click on the map below to show a more detailed map (when available) or search for studies (when map not available).



Clinical Trial Collaborations

ClinicalTrials.gov – Aduna Cluster Map

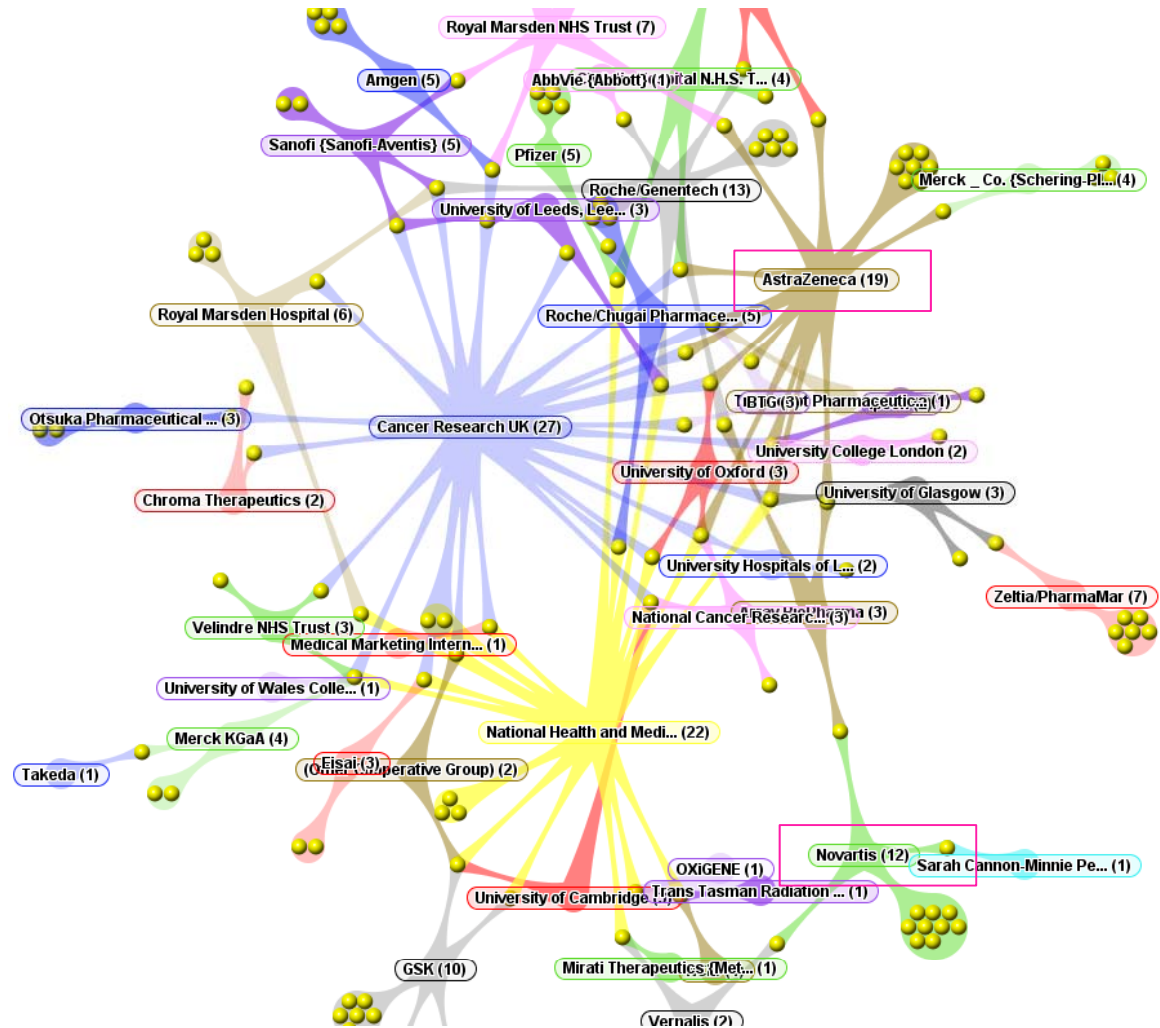
Limited clean-up using VP-SCE on small set of data from ClinicalTrials.gov does not provide a lot of insight into pharma company connections to research and academic institutions



Clinical Trial Collaborations

Citeline TrialTrove

- Visualisation of larger answer set in TrialTrove shows many more relationships



Clinical Trial Collaborations

Search Learnings

- Citeline provided significantly higher recall than CT.gov
- Example: NCT00809133 does not mention 'esophageal cancer' at all in the CT.gov record, corresponding CTT record is indexed for this condition and notes in "Patient Population"
 - "2009 ASCO Annual Meeting Sixteen patients (6 male/10 female; median age: 59 [range: 39-72]; ECOG PS 0/1: 5/11). Patients with non-small cell lung cancer (3), prostate cancer (1), oesophageal cancer (1) and cholangiocarcinoma (1). "
- CT.gov data includes relatively clean post code data so can be displayed down to UK county level
- XML from CT.gov has better structure for accessing this information
- TrialTrove data includes post code data but the information is buried in free text
- How can we leverage recall of CTT with structure of CT.gov?



Extracting trials from ClinicalTrials.gov

Citeline TrialTrove: <code>trialtrove_2675925</code>		
	Trial Title	Trial Identifier
51	A Phase I Open Label Trial of Continuous Dosing With BIBW 2992 Combined With Paclitaxel and BIBW 2992 Combined With Paclitaxel and Bevacizumab, BIBW 2992 Combined With Carboplatin and BIBW 2992 Combined With Paclitaxel and Carboplatin in Patients With Advanced Solid Tumours	1200.12 BIBW 1200.12 EudraCT Number: 2006-005005-55 NCT00809133 TrialTroveID-102 148
52	A Phase I Clinical Trial of CXR 1002 in Patients With Advanced Cancer.	SA125 TrialTroveID-102 948
	A Phase I Dose Escalation Study of MK-2206 in	003-00 003 MK-2206



16 records at a time

<http://www.clinicaltrials.gov/ct2/results?id=NCT00002615+OR+NCT00003698+OR+NCT00004236+OR+NCT00041262+OR+NCT00072332+OR+NCT00073502+OR+NCT00080002+OR+NCT00087503+OR+NCT00090207+OR+NCT00113581+OR+NCT00169520+OR+NCT00193882+OR+NCT00215644+OR+NCT00220064+OR+NCT00220103+OR+NCT00220129&studyxml=true>

Export all trial IDs



Clinical Trial Locations Geographical Mapping

Searches, process and learnings

ClinicalTrials.gov (CT.gov), basic search: Sjogrens

Citeline TrialTrove (CTT), disease field: Sjogrens

Database	No. of trials	Unique counts
CT. gov	69	58
CTT	162	135

Overlap 34 trials

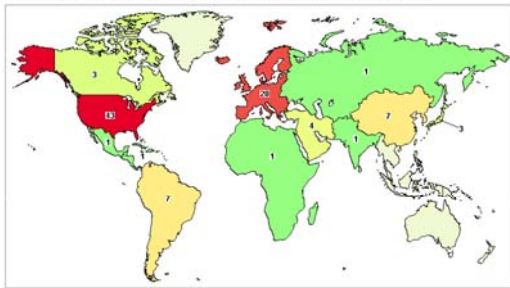


Clinical Trial Locations Geographical Mapping

Geo mapping at country level- 'quick' solutions

CT.gov

92 studies found, shown on map.
 A similar map is available for all studies in ClinicalTrials.gov
 Click on the map below to show a more detailed map (when available) or search for studies (when map not available).

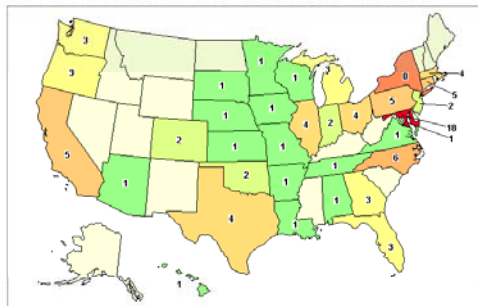


Colors indicate number of studies with locations in that region
 Least Most
 Labels give exact study count

Region Name	Number of Studies	Hints:
World	92	Click on a [map] link to show a map of that region.

US State View

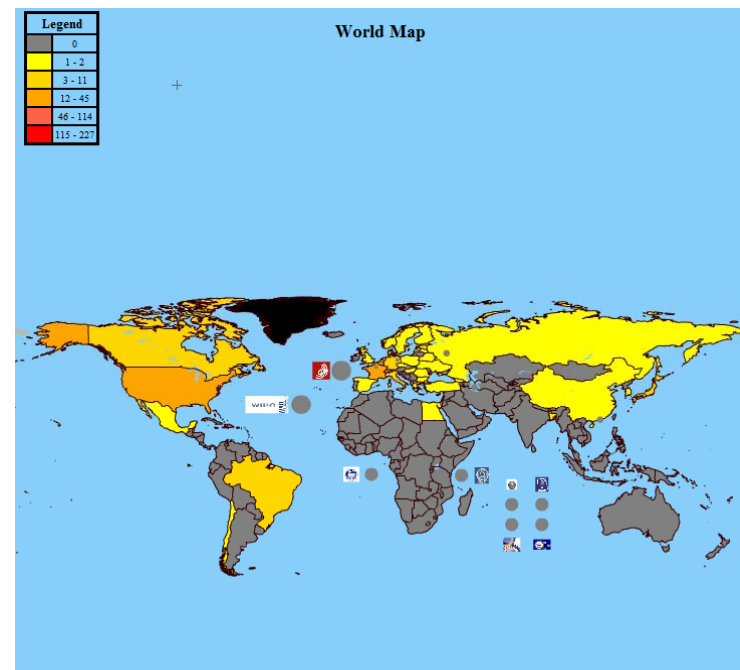
92 studies found, shown on map.
 A similar map is available for all studies in ClinicalTrials.gov
 Click on the map below to show a more detailed map (when available) or search for studies (when map not available).



Colors indicate number of studies with locations in that region
 Least Most
 Labels give exact study count

Region Name	Number of Studies	Hints:
World [map]	92	Click on a [map] link to show a map of that region.

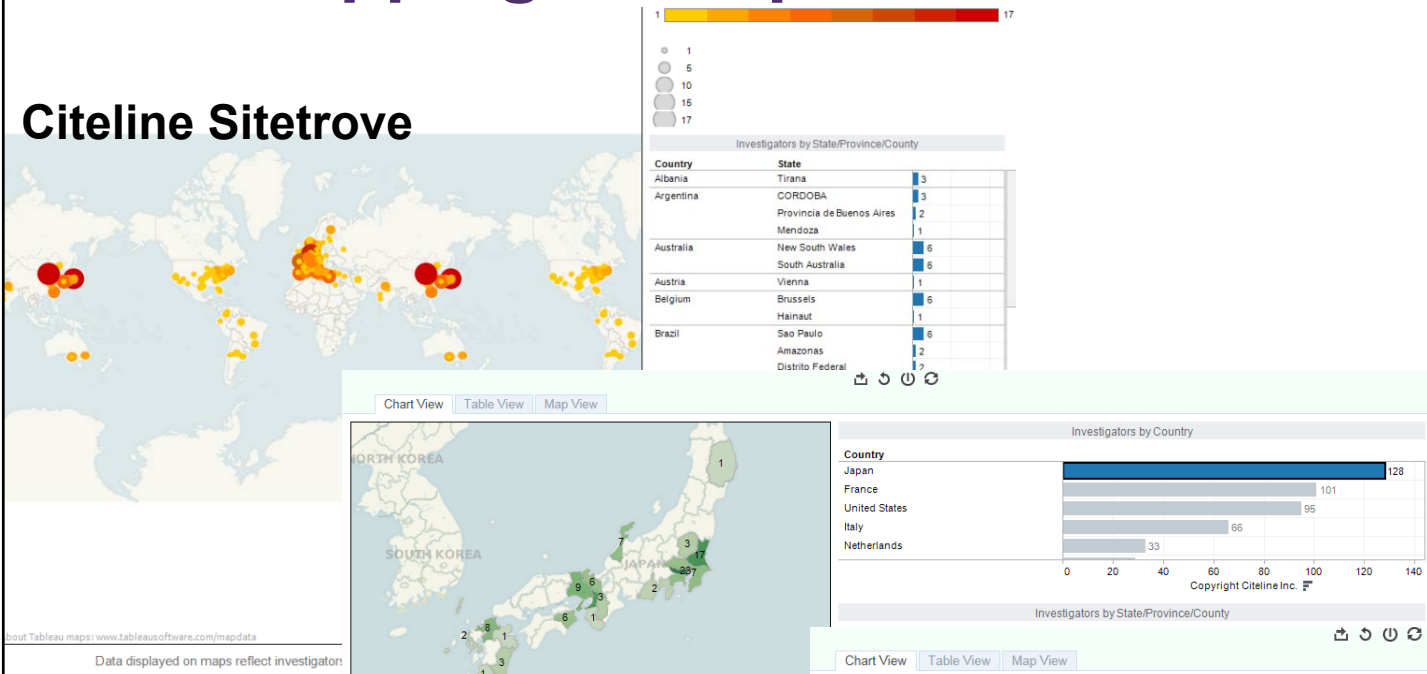
VP-SCE: Integration of data - country level



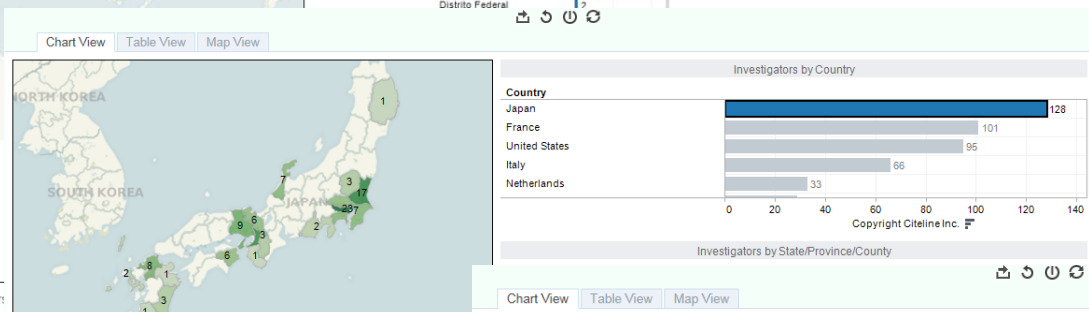
Clinical Trial Locations Geographical Mapping

Geomapping- multiple databases at city level

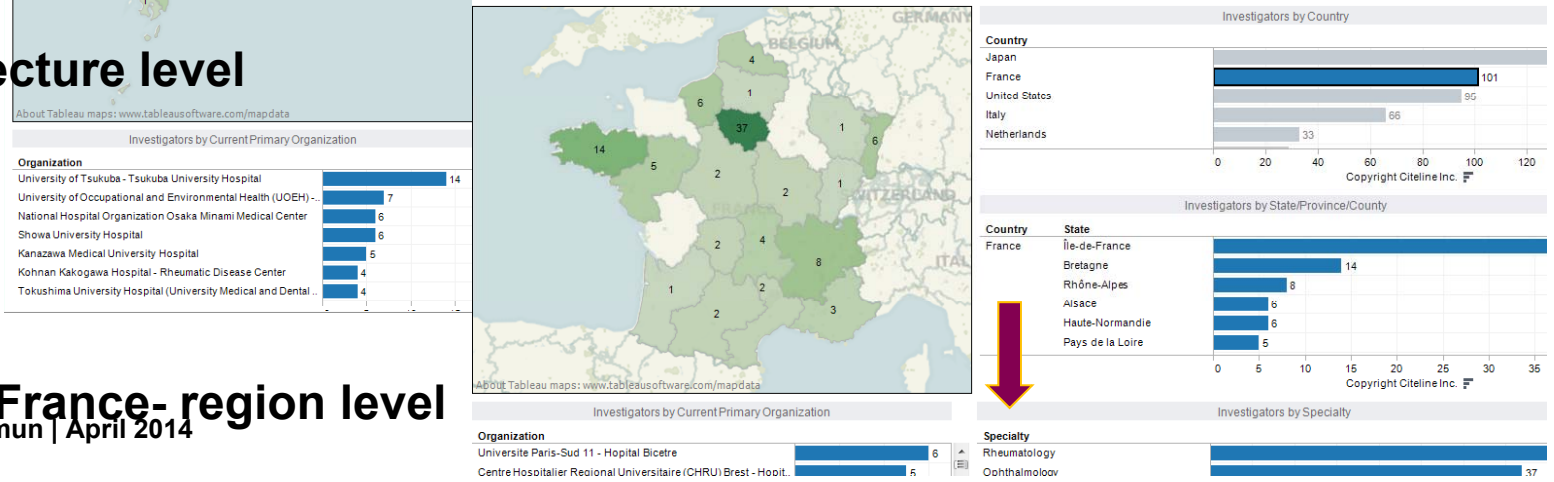
Citeline Sitetrove



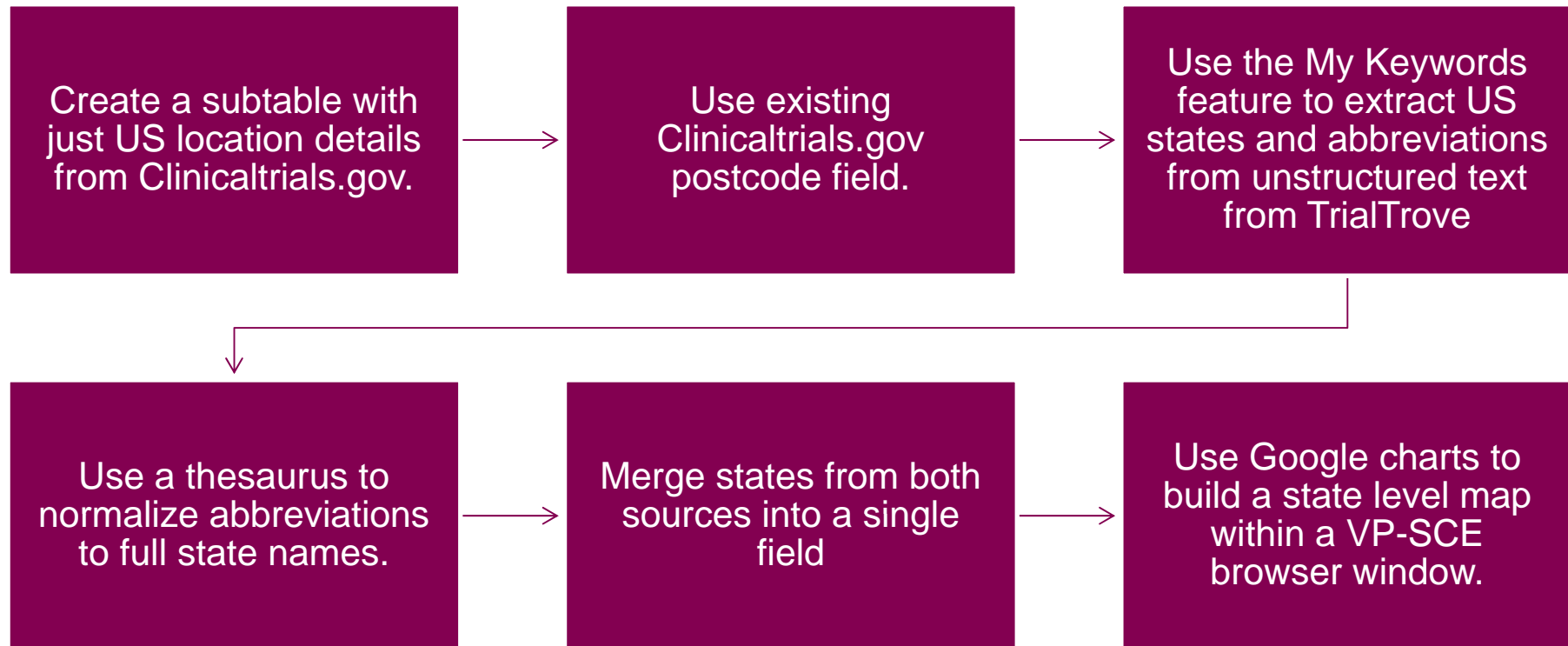
Japan at prefecture level



France- region level



Mapping US States



State extracted from all trials but one

	# Records	# Instances	Common Trial ID	mapped
1	1	1	NCT01235234	☐
2	1	1	AI-059893	☐
3	1	1	ISRCTN10758297	☐
4	1	1	NCT00001196	☐
5	1	1	NCT00001598	☐
6	1	1	NCT00001599	☐
7	1	1	NCT00001731	☐
8	1	1	NCT00001852	☐
9	1	1	NCT00001953	☐
10	1	1	NCT00001954	☐
11	1	1	NCT00023491	☐
12	1	1	NCT00025818	☐
13	1	1	NCT00048685	☐
14	1	1	NCT00074373	☐
15	1	1	NCT00074685	☐
16	1	1	NCT00100204	☐
17	1	1	NCT00101829	☐
18	1	1	NCT00278512	☐
19	1	1	NCT00284999	☐
20	1	1	NCT00341198	☐
21	1	1	NCT00344448	☐
22	1	1	NCT00460928	☐
23	1	1	NCT00502073	☐
24	1	1	NCT00513591	☐
25	1	1	NCT00548301	☐
26	1	1	NCT00565526	☐

Trial Locations	Investigators / Contacts	Location Details			
		Facility	Country	City	Post Code
Bulgaria ✓ Europe Israel Romania United States	Michael H Silverman, MD ✓ Study Director Can-Fite BioPharma Assaf Harophe Zrifin, Israel Contact: Sari Fishman, PhD Bnei Zion Medical Center Haifa, Israel, 31048 Phone: +972-3-9241114 E-mail: sari@canfite.co.il Can-Fite BioPharma, Responsible Party				
Israel	Roger Vogel, MD Study Chair Sirion Therapeutics Darin Brimhall, DO Principal Investigator Novum Pharmaceutical Research Services Daniel V Freeland, DO Principal Investigator CEDRA Clinical Research, LLC Roger Vogel, MD Study Chair Rx Development Resources, LLC Terry Laliberte, BS Study Director River Plate Biotechnology, Inc. Charles (Andy) Kirby, MD Principal Investigator Chattanooga Eye Institute, Chattanooga, TN Mark Abrams, MD Principal Investigator Abrams Eye Center	Bnei Zion Medical Center	Israel	Haifa	31048 ✓



Potential Pitfalls of Keyword Extraction

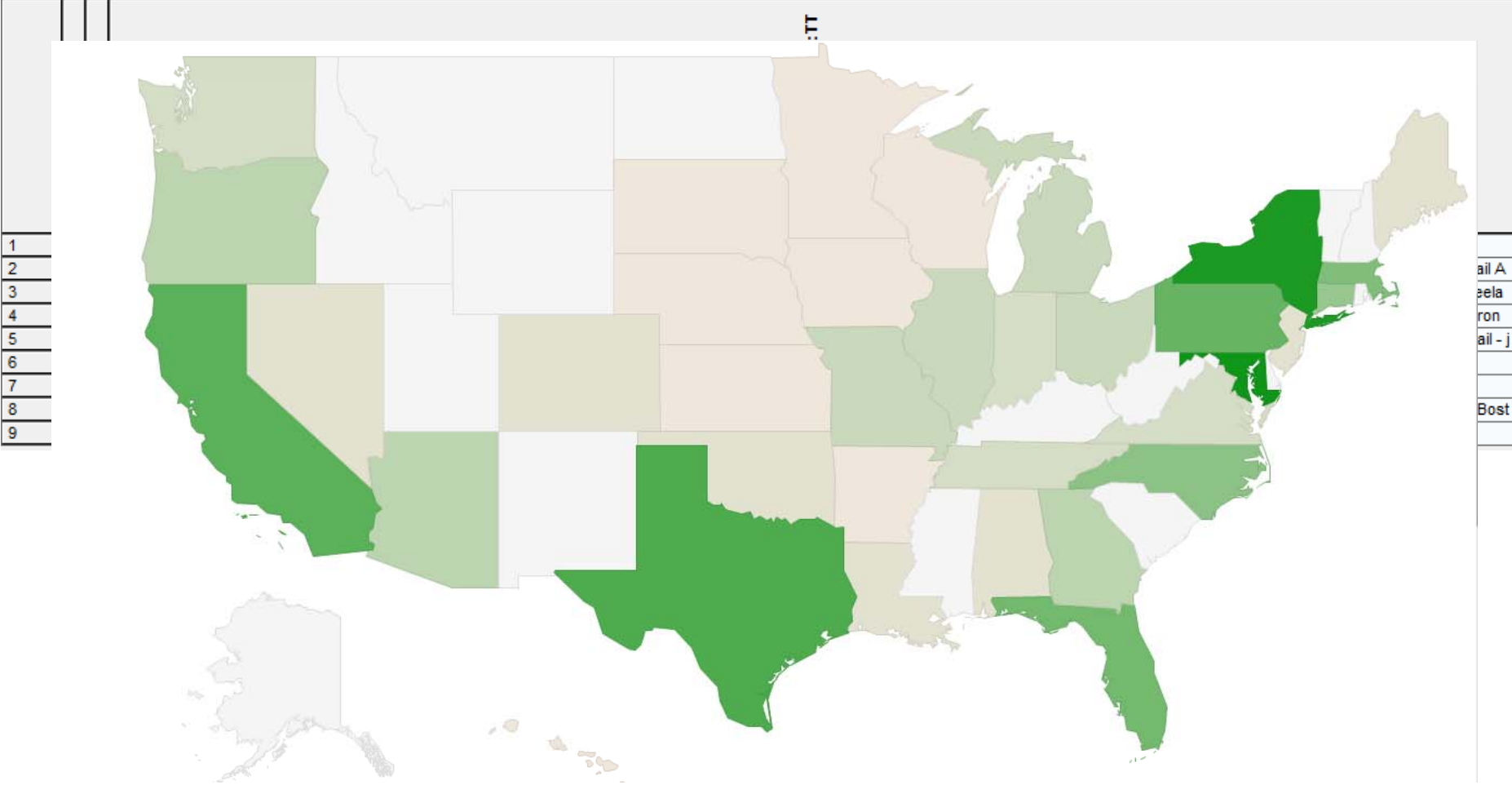
Field Name	Value
Common Trial ID	TrialTroveID-185670
Disease	Sjogren's Syndrome
Investigators / Contacts	Yumi Yamaguchi, Keishi Fujio, Hirofumi Shoda, Akiko Okamoto, Mihoko Shibuya, Shuji Sumitomo, Kazuhiko Yamamoto Department of Allergy and Rheumatology, The University of Tokyo, Japan
Primary Drugs	pilocarpine, MGI
Primary Endpoints Reported	2013-04-18
recordID	com.bizcharts:C#\Users\matt\Documents\I-SDV\Sjogrens TT+CTI truncated.chrr:TROVE:185670
Sponsorship	(Other Hospital/Academic/Medical Center)
Target Accrual	N/A
Trial Identifier	TrialTroveID-185670
Trial Locations	Japan
Trial Objectives	To investigate the effect of pilocarpine hydrochloride against the morning xerostomia with sjogren's syndrome patients. To evaluate sleep disruption to count the waking times due to water intake, morning xerostomia, oral pain and sticky mouth feeling using the VAS scale on days 1 and 28.
Trial Phase	IV
Trial Status	Completed
Trial Title	Efficacy of pilocarpine hydrochloride for dry mouth in the morning with Sjogren's syndrome
Investigators / Contacts : Japan prefectures	Tokyo Yamaguchi

Investigators / Contacts	Location Details				State CT+TT
	Facility	Country	City	Post Code	
Dr John C Davis Clinical Trials Center, Division of Rheumatology, University of California, San Francisco, 533 Parnassus Avenue Box 0633 Room U383, San Francisco, CA 94143-0633, USA; E-mail - jdavis@medicine.ucsf.edu B Gescuk, S Lund, K Fye Division of Rheumatology, University of California, San Francisco, California, USA A J Wu, J P Whitcher, T E Daniels The Sjögren's Syndrome Clinic, University of California, San Francisco	✓				✓ California ✓
Principal Investigator: Darin Brimhall, DO Novum Pharmaceutical Research Services Las Vegas, Nevada, United States, 89121 Responsible Party: Roxane Laboratories	✓				✓ Nevada ✓
Athena S. Papas DMD, PhD Department General Dentistry - Dental Tufts University Dental Health Sch-1 Kneeland, Boston Phone: (617) 636-3932 Pager: (617) 604-4234 Fax: (617) 636-4083 Email Address: athena.papas@tufts.edu Dr. Yvonne S. Sherrer, F.A.C.P., MD C.R.I.A. 5333 N. Dixie Highway, Suite 110, Ft. Lauderdale, Florida 33334 Phone: 954- 229-7030 Charney, Michael MD; Golden, Harvey E. MD; Medsger, Thomas A. Jr MD; Walsh, Bridget T. DO; Trivedi, Madhu PhD, MBA; Goldlust, Barry PhD; Gallagher, Susan C. MS, MBA	✓				✓ Florida Mississippi ✓

descriptor | Sub level 1



VP-SCE Extract States to build a Map with Google Geocharts



ClinicalTrials.gov: Select UK sites and postcodes

	# Records	# Instances	Location Details				UK
			Facility	Country	City	Post Code	
1	4	4	Aberdeen Royal Infr	United Kingdom	Aberdeen, Scotland	AB25 2ZN	✓
2	4	4	Royal Marsden Hosp	United Kingdom	Sutton, Surrey	SM2 5PT	✓
3	3	3	Addenbrooke's Hosp	United Kingdom	Cambridge, England	CB2 2QQ	✓
4	3	3	Bristol Haematology	United Kingdom	Bristol, England	BS2 8ED	✓
5	3	3	Novartis Investigative	United Kingdom	Glasgow	G12 0YN	✓
6	3	3	Novartis Investigative	United Kingdom	Sutton	SM2 5PT	✓
7	3	3	Research Site	United Kingdom	London		✓
8	3	3	Research Site	United Kingdom	Manchester		✓
9	3	3	Research Site	United Kingdom	Sutton		✓
10	3	3	Southampton Genera	United Kingdom	Southampton, Englan	SO16 6YD	✓
11	3	3	St. Luke's Cancer Ce	United Kingdom	Guildford, England	GU2 7XX	✓
12	3	3	Velindre Cancer Cen	United Kingdom	Cardiff, Wales	CF14 2TL	✓
13	2	2	Aintree University Ho	United Kingdom	Liverpool, England	L9 7AL	✓
14	2	2	Christie Hospital	United Kingdom	Manchester, England	M20 4BX	✓
15	2	2	Clatterbridge Centre	United Kingdom	Merseyside, England	CH63 4JY	✓
16	2	2	Cumberland Infirmary	United Kingdom	Carlisle, England	CA2 7HY	✓
17	2	2	Derriford Hospital	United Kingdom	Plymouth, England	PL6 8DH	✓
18	2	2	Doncaster Royal Infr	United Kingdom	Doncaster, England	DN2 5LT	✓
19	2	2	Dorset Cancer Cent	United Kingdom	Poole Dorset, Englan	BH15 2JB	✓
20	2	2	Gloucestershire Roy	United Kingdom	Gloucester, England	GL1 3NN	✓
21	2	2	GSK Investigational S	United Kingdom	London	W12 0HS	✓
22	2	2	Leicester Royal Infr	United Kingdom	Leicester, England	LE1 5WW	✓
23	2	2	Lincoln County Hosp	United Kingdom	Lincoln, England	LN2 5QY	✓
24	2	2	Ninewells Hospital	United Kingdom	Dundee, Scotland	DD1 9SY	✓
25	2	2	Northern Centre for	United Kingdom	Newcastle-Upon-Ty	NE4 6BE	✓
26	2	2	Novartis Investigative	United Kingdom	Oxford	OX3 7LJ	✓
27	2	2	Novartis Investigative	United Kingdom	Sutton, Surrey	SM2 5PT	✓
28	2	2	Research Site	United Kingdom	Guildford		✓
29	2	2	Research Site	United Kingdom	Glasgow		✓
30	2	2	Research Site	United Kingdom	Wolverhampton		✓
31	2	2	Royal Marsden - Sur	United Kingdom	Sutton, England	SM2 5PT	✓
32	2	2	The Christie NHS Fou	United Kingdom	Manchester	M20 4BX	✓
33	2	2	University Hospitals	United Kingdom	Leicester, Leicesters	LE1 5WW	✓
34	2	2	Wexham Park Hospit	United Kingdom	Slough, Berkshire, E	SL2 4HL	✓
35	1	1	1200.12.4401 Boehr	United Kingdom	Sutton		✓
36	1	1	1200.12.4402 Boehr	United Kingdom	London		✓
37	1	1	1200.24.4401 Boehr	United Kingdom	Sutton		✓
38	1	1	1200.24.4402 Boehr	United Kingdom	London		✓

	# Records	# Instances	Location Details:
1	6	6	SO16 6YD
2	4	4	ME16 9QQ
3	1	1	TR1 3LJ
4	5	5	HA6 2RN
5	1	1	LL18 5UJ
6	9	9	SW3 6JJ
7	5	5	G12 0YN
8	4	4	AB25 2ZN
9	4	4	BS2 8ED
10	4	4	CB2 2QQ
11	1	1	HD3 3EA
12	1	1	NE29 8NH
13	3	3	BT9 7AB
14	3	3	CF14 2TL
15	1	1	NG5 1PB
16	1	1	PE3 6DA
17	1	1	WC1E 6BT
18	2	2	BH15 2JB
19	2	2	CA2 7HY
20	2	2	CH63 4JY
21	2	2	DD1 9SY
22	2	2	DN2 5LT
23	2	2	EC1A 7BE
24	2	2	EH4 2XU
25	2	2	GL1 3NN
26	1	1	LE7 5WW
27	1	1	LS16 6QB
28	1	1	NG7 2UH
29	1	1	NW1 2PQ
30	1	1	PR8 6PN
31	2	2	SL2 4HL
32	1	1	SO14 0YG
33	1	1	TA1 5DA



We can use a thesaurus to check for data-entry errors in ClinicalTrials.gov data

	# Records	# Instances	Location Details:
1	6	6	SO16 6YD
2	4	4	ME16 9QQ
3	1	1	TR1 3LJ
4	5	5	HA6 2RN
5	1	1	LL18 5UJ
6	9	9	SW3 6JJ
7	5	5	G12 0YN
8	4	4	AB25 2ZN
9	4	4	BS2 8ED
10	4	4	CB2 2QQ
11	1	1	HD3 3EA
12	1	1	NE29 8NH
13	3	3	BT9 7AB
14	3	3	CF14 2TL
15	1	1	NG5 1PB
16	1	1	PE3 6DA
17	1	1	WC1E 6BT
18	2	2	BH15 2JB
19	2	2	CA2 7HY
20	2	2	CH63 4JY
21	2	2	DD1 9SY
22	2	2	DN2 5LT
23	2	2	EC1A 7BE
24	2	2	EH4 2XU
25	2	2	GL1 3NN
26	1	1	LE7 5WWW
27	1	1	LS16 6QB
28	1	1	NG7 2UH
29	1	1	NW1 2PQ
30	1	1	PR8 6PN
31	2	2	SL2 4HL
32	1	1	SO14 0YG
33	1	1	TA1 5DA

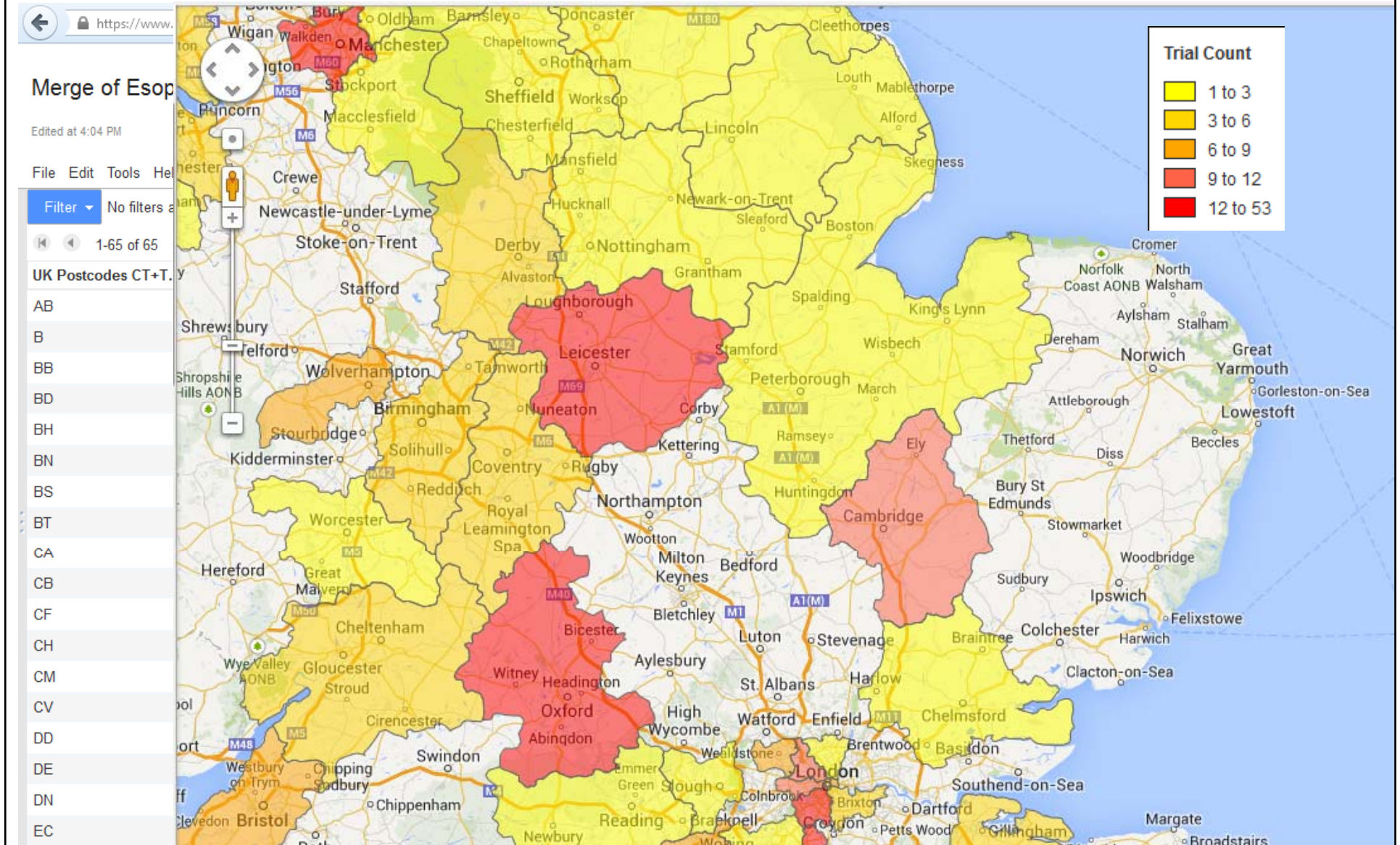


TrialTrove: VP-SCE Used to Extract Postcodes

	# Records	# Instances		# Records	# Instances	Investigatc	# Records	# Instances	UK Postcod		
				1	36	36	SM2 5PT	1	51	64	SM
				2	9	9	M20 4BX	2	20	23	M
				3	7	7	OX3 7LJ	3	17	18	G
				4	5	5	BT9 7AB	4	16	16	SW
82	1	1	Chief Investigator: Prof David C	5	5	5	EC1V 4AD	5	13	13	OX
83	1	1	Claire Harrison1, Richard M. Pa	6	5	5	LE1 5WW	6	12	13	LE
84	1	1	Clinical Trials	7	5	5	NW1 2DA	7	10	12	CB
85	1	1	Clinical Trials, Study Director H	8	5	5	WC2A 3PX	8	10	10	NW
86	1	1	Contact: Alex Jonson Cambridg	9	4	4	G11 6NT	9	9	9	BT
87	1	1	Contact: Amgen Call Cent	10	4	4	HA6 2RN	10	9	9	LS
88	1	1	Contact: Boehringer Ingel	11	4	4	WV10 0QP	11	9	9	NE
89	1	1	Contact: Chugai Pharma E	12	3	3	CB2 0QQ	12	9	10	W
90	1	1	Contact: ImClone Systems	13	3	3	CF14 2TL	13	8	8	BS
91	1	1	Contact: Novartis Pharma	14	3	3	LS2 9LT	14	8	9	HA
92	1	1	Contact: Novartis Pharma	15	3	3	NE2 4HH	15	8	10	SO
93	1	1	Contact: Ph: 888-662-672	16	3	3	SO16 6YD	16	8	9	WC
94	1	1	Contact: Trial Manager Ph	17	2	2	BS2 8ED	17	8	9	WV
95	1	1	Daniel Chen, M.D., Ph.D. C	18	2	2	DE22 3NE	18	7	8	EC
96	1	1	David Cunningham, M.D. (19	2	2	G12 0YN	19	7	7	GU
97	1	1	David Cunningham, MD	20	2	2	G61 1BD	20	6	7	CF
98	1	1	David Ferry Department o	21	2	2	SM2 5NG	21	5	5	SE
99	1	1	David Ilson MD, PhD; Princ	22	2	2	SW3 6JJ	22	4	4	AB
100	1	1	David J Bowrey, MD Stud	23	2	2	W12 0NN	23	4	7	B
101	1	1	David Sternberg, MD, PhD	24	1	1	B18 7QH	24	4	4	EH
102	1	1	Dr A Maraveyas, Acaden	25	1	1	B29 6JD	25	4	4	ME
103	1	1	Dr A O'Donnell, Wellingt	26	1	1	BD7 1DP	26	3	3	CH
104	1	1	Dr Andrew Jackson Southamp	27	1	1	BS2 8HW	27	3	3	CV
105	1	1	Dr Anne Thomas, Study invest	28	1	1	CB2 2QQ	28	3	3	DE
106	1	1	Dr Brian Haylock, Clatterbridge	29	1	1	CF14 4XW	29	3	4	GL
107	1	1	Dr Chris Baughan; Chief Invest	30	1	1	CH63 4JY	30	3	3	HU
108	1	1	Dr Christian Ottensmeier, Some	31	1	1	CV2 2DX	31	3	4	L
109	1	1	Dr D J Girling, MRC Clinical Trial	32	1	1	EH4 2XR	32	3	3	PO
110	1	1	Dr D. Cunningham, GI and Lym					33	2	2	BD
111	1	1	Dr Daniel Hochhauser, Cancer					34	2	3	BH
112	1	1	Dr David Ferry The Royal Wolv								
113	1	1	Dr Emille Wilkes Derby Hospital								
114	1	1	Dr Falm Eskens, Erasmus MC U								
115	1	1	Dr Hugo Ford, Oncology Centre								
116	1	1	Dr Ian Judson Clinical Pharmac								



Google Fusion and Google Maps to build the Map



Clinical Trial Locations Geographical Mapping

Learnings

- Mapping sites below country level is still a challenge
- ‘non- standard’ English characters in CT.gov must be manually curated
- Non-standardisation entry of address fields in CT.gov
 - i.e. Research Triangle Park, NC- city is not listed- Raleigh. This is correctly mapped in Google Geocharts but may not be in other mapping tools.
- BizInt Pipeline latest version (3.6.1) will extract cities and postcodes from CT.gov
- With 3.6.1, cities and postcodes from CTT can be extracted but entails many steps- the keyword feature in Vantage Point is used to create the ‘vocabulary’ and then export back to BizInt.
- Sitetrove generates decent maps at state level but one is not able to review the data
- The advantage of using the database features to generate the mappings is that one can click through to the trial information



Clinical Trial Timeline

Background

- How can we rapidly gain an understanding of the clinical trial landscape from multiple data sources
- By mapping trials onto a visual timeline we can easily gain a temporal overview of competitor trials
- Data on DPP-IV inhibitor trials was search in CT.gov and CTT



Clinical Trial Timeline Process

- **TrialTrove and CT.gov data imported and merged in BizInt Smart Charts and Reference Rows**
- **Data sent to VP-SCE**
- **Further processing**
 - Date extraction
 - Standard vocabulary for status and phase of trial applied
 - Sponsors cleaned up
- **Visualisation macro used to generate timeline view**



VantagePoint – Smart Charts Edition (VP-SCE)

Date Extraction

Number of Records: 363 Source Database: Bizint Smart Charts Reference Rows 1.1.1
 Source Date: Mar 27 2014 11:26 Source File: \\nemea.astrazeneca.net\UK\Alderley Park\Users 02\MPA701Q\Documents\Information Science ISA\Bizint

Field	Number of Items	% Coverage	Data Type	Meta Tags
# Arms	11	64%		
Acronym	28	7%		
Arms	555	65%		Parent
Group	353	65%		Child
Type	6	65%		Child
Description	383	44%		Child
Brief Summary	382	100%		
Common Trial ID	363	100%		
Completion Date	236	89%		
Condition	55	100%		
Countries	86	98%		
Detailed Description	78	20%		
Drugs	319	100%		
Eligibility Criteria	966	74%		
Enrollment	287	100%		
Full Text Link		100%		
Gender		93%		
Healthy Volunteers?		67%		
Interventions		74%		Parent
Name				
Type				
Description				
Group				
Last Changed Date				
Location Details				
Facility				
Country				
City				
Post Code				
Maximum Age				
Minimum Age				
Num. Locations				
Num. Recruiting				
Original Title	268	73%		

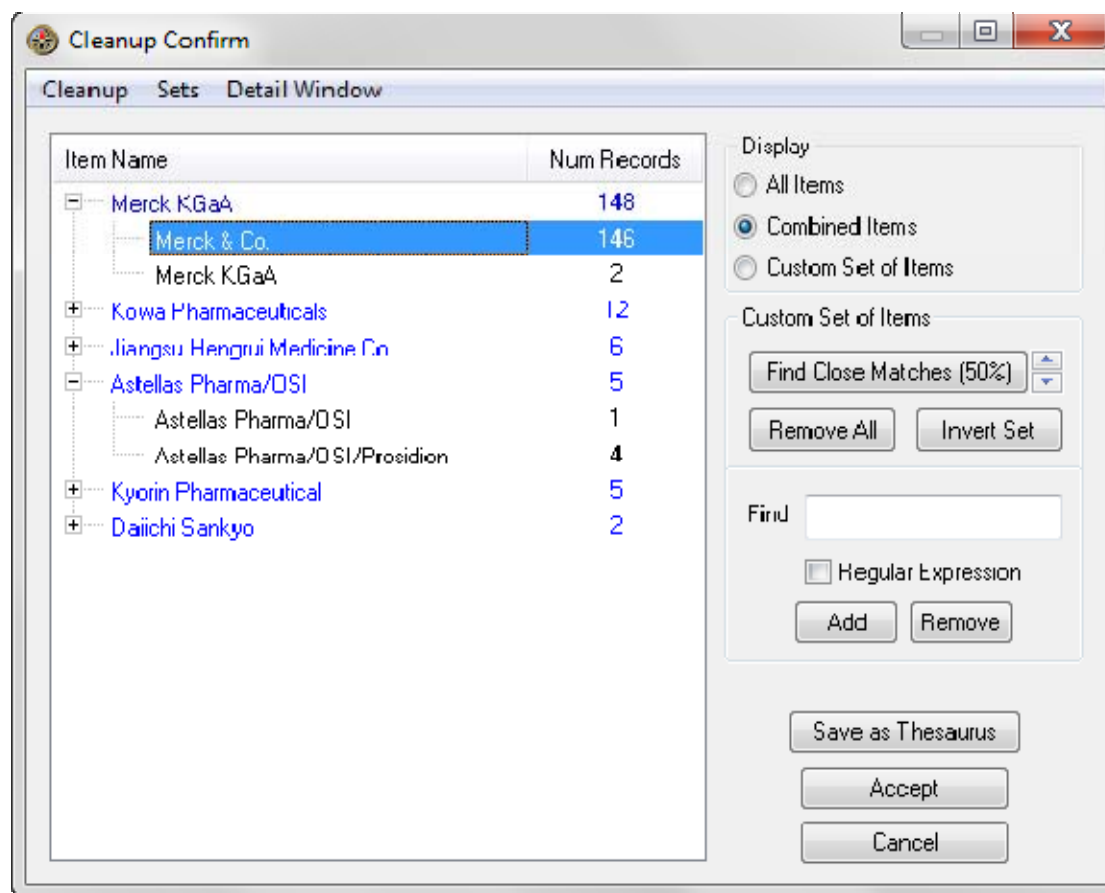
Context menu for 'Completion Date':

- Create List
- List Cleanup...
- Thesaurus...
- Find and Replace...
- Further Processing
 - :Read All
 - Apply Proper Case
 - Author Cleanup
 - Dates
 - Convert DD-Mmm-YYYY to YYYY-MM-DD
 - Convert M/D/YYYY to YYYY-MM-DD
 - Convert Month DD, YYYY to YYYY-MM-DD
 - Convert YYYY-MM-DD to YYYYMMDD
 - Extract Years
 - Remove Time
 - Divide at
 - Divide Authors
 - Extract Country
 - NLP
 - Read After - First
 - Read After - Last
 - Read Until - First
 - Read Until - Last
 - Remove
- Rename Field...
- Copy Field...
- Set Data Type
- Set Meta Tags...
- Delete Field...
- View Statistics...
- Zoom



VantagePoint – Smart Charts Edition (VP-SCE)

Company Cleanup



VantagePoint – Smart Charts Edition (VP-SCE)

Date Clean-up

	# Records	# Instances	Overall Status	Active, Not Recruiting	Completed	Open, Recruiting	Planned	Terminated
1	633	633	Completed	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2	50	50	Terminated	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
3	48	48	Recruiting	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4	29	29	Open	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5	18	18	Not yet recruiting	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
6	16	16	Active, not recruiting	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7	12	12	Planned	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
8	8	8	Closed	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9	3	3	Withdrawn	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
10	1	1	Enrolling by invitation	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11	1	1	Suspended	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

	# Records	# Instances	Sponsor(s) (1) (Cleaned) - Con
328	1	1	Laval University - NCT00660075
329	1	1	Laval University - NCT01334229
330	1	1	Lexicon Pharmaceuticals - NCT01441232
331	1	1	LG Life Sciences - NCT01001013
332	1	1	LG Life Sciences - NCT01426399
333	1	1	LG Life Sciences - NCT01426906



Clinical Trial Timeline

Timeline Macro

VantagePoint SCE Browser

Timeline Gantt

Select the field to chart:
 Sponsor(s) (1) (Cleaned) - Common Trial ID

Select a group
 All items in field

Takeda Key

Select Start Year: Completion Date: Dates/Extract Years

Select Completion Year: Completion Date: Dates/Extract Years

Select Phase Field: Phase

Select Timeline Colors

Phase Colors #1
 Phase Colors #2
 Phase Colors #3

Name this timeline:

Common Trial ID Timeline

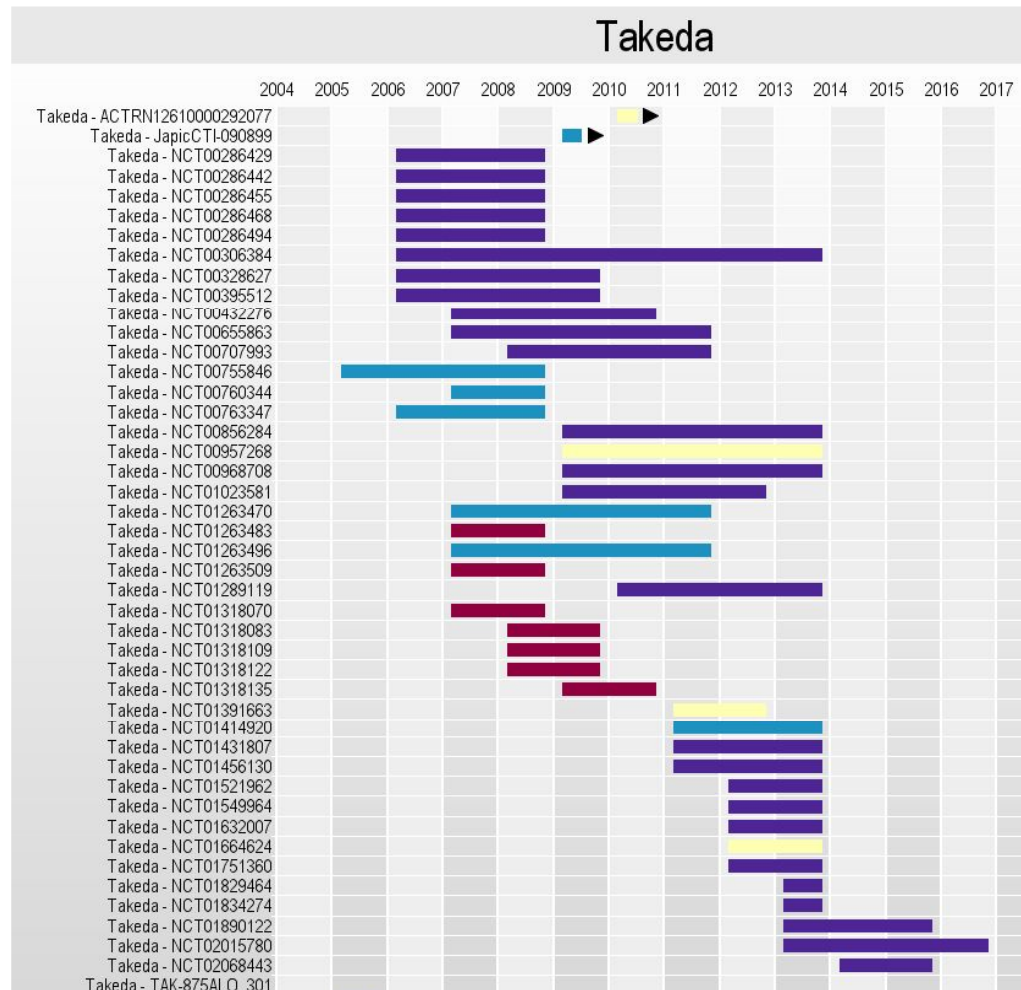
Cancel OK



Clinical Trial Timeline

Trial Timeline by Phase

- Landscape of Takeda's DPP-IV inhibitor trials
- Colour reflects the trial phase



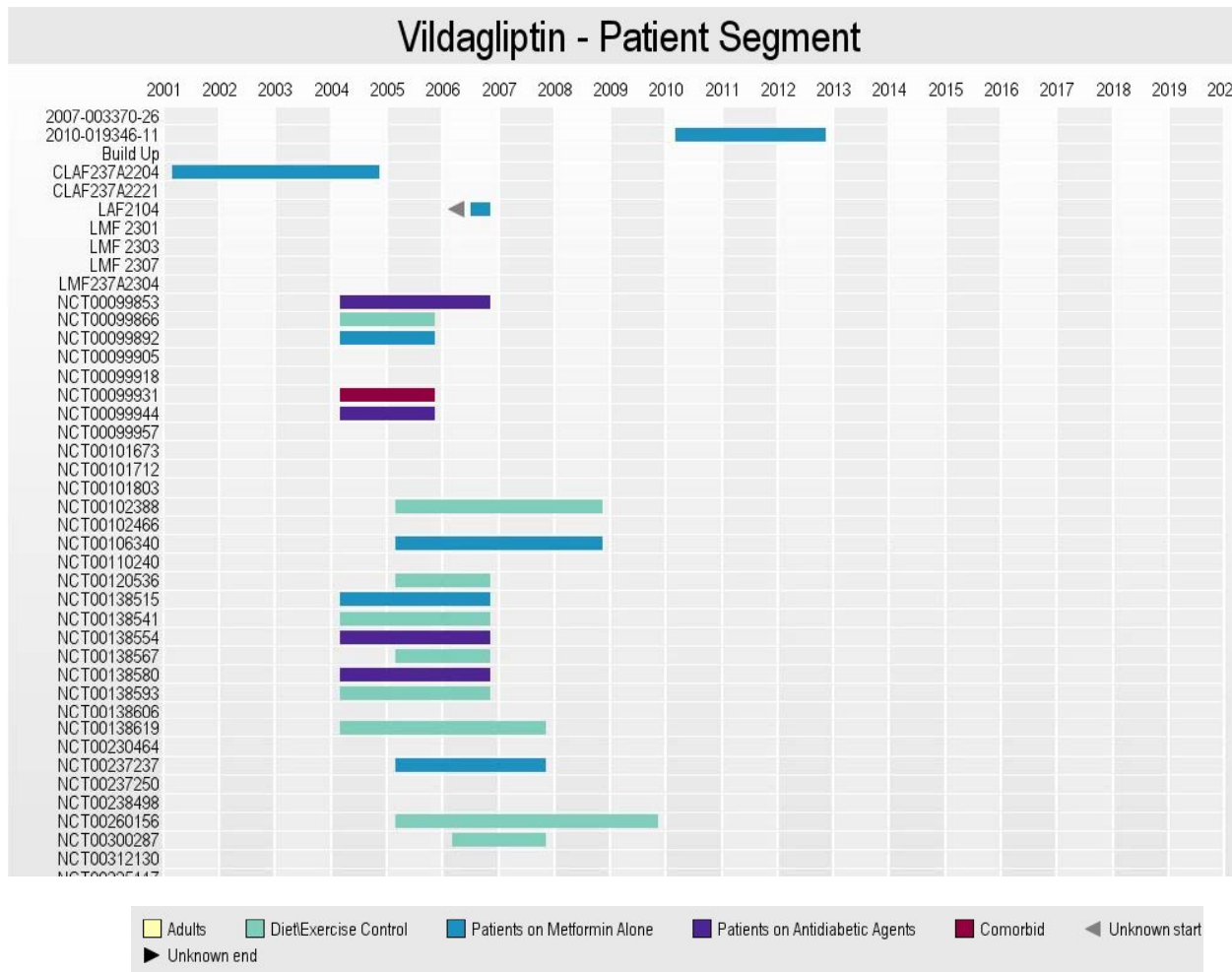
Clinical Trial Timeline

Trial Timeline by Trial Status



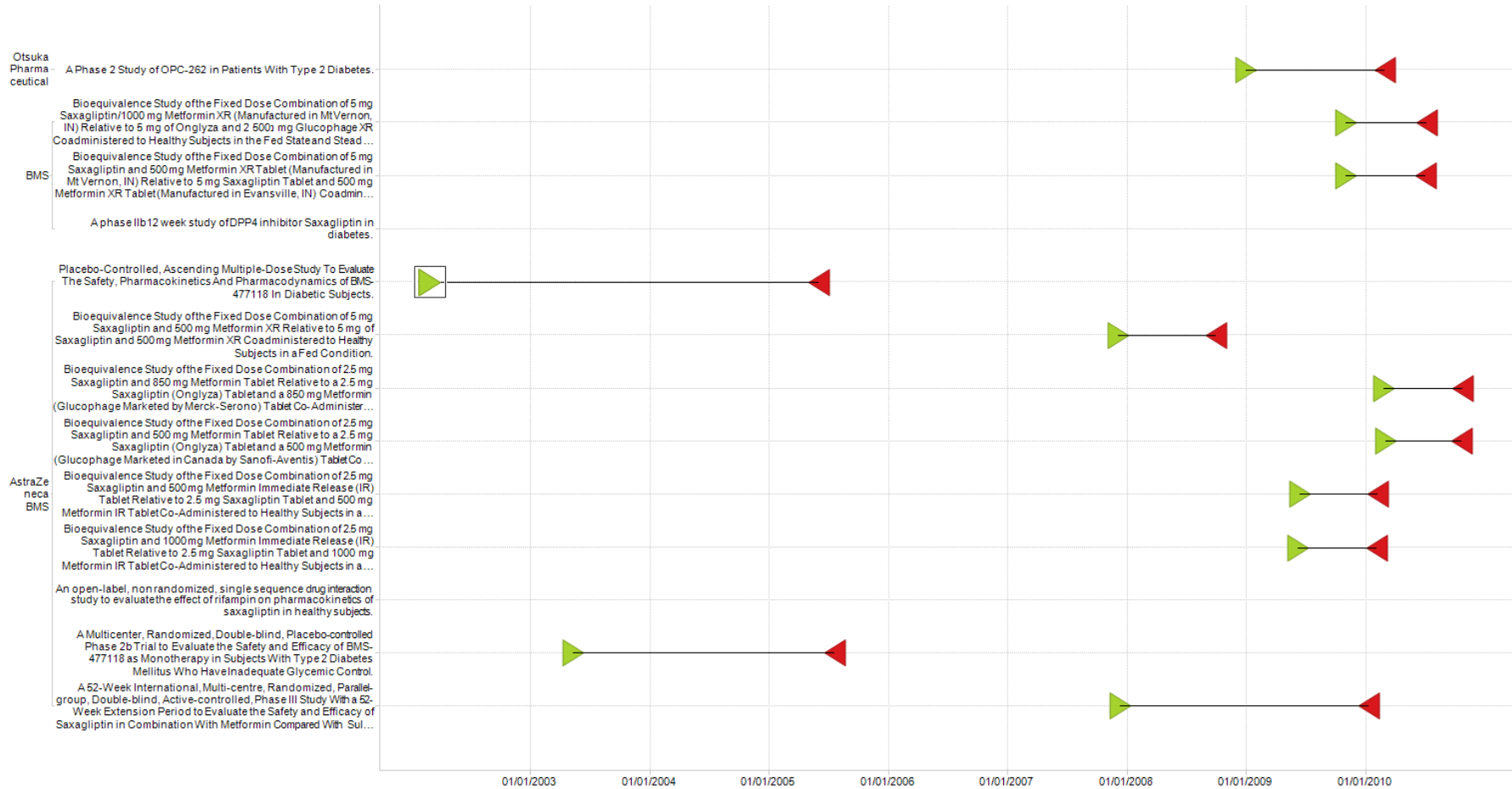
Clinical Trial Timeline

Trial Timeline by Patient Population



Clinical Trial Timeline

TIBCO Spotfire



Wish List

Improvements to make these analyses easier

- **Transfer NCT numbers from a TrialTrove result set into CT.gov**
- **Freeze trial timeline and legend**
- **Dates – clients think by quarters as opposed to years in the timelines**
- **Improve recognition of non-Western language characters – e.g. Sjögrens**



Conclusions

- **Multiple clinical trial resources are needed to gain accurate insights into the clinical landscape**
- **Combination of Smart Charts and VP-SCE is a powerful tool kit to harmonize trial data across different sources**
- **You do need to invest time in the data cleansing process**
- **Geo Mapping is simplified extracting the trials location information in a multistep procedure.**



Team Involved



Jasen Choramun, AZ



Jeanette Eldridge, AZ



So Man, AZ



**Matt Eberle,
BizInt**



**John Willmore,
BizInt**



**Diane Webb,
BizInt**

Thank you

For more information
about AstraZeneca and
activities worldwide,
visit astrazeneca.com

For more information
about BizInt,
visit bizint.com

