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Ist Medical Affairs Effektivität messbar? Using Medical Affairs Analytics to Power Strategic Decision Making and Measure Success

Medical Affairs Network Meeting Frankfurt 24.Oktober

Christian Schweiger, MD, PhD
Vice President, Medical Affairs Strategy E.U
Pharmaspectra (Formerly Medmeme LLC)

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EMEA Annual Meeting
21–23 October, 2018
BERLIN, GERMANY

Using Medical Affairs Analytics to Power Strategic Decision Making and Measure Success: Learning Objectives

Using Medical Affairs Analytics To:

- Understand where best to position product information to maximize impact in the scientific landscape
- Determine which forums may work better than others in order to enhance the impact of dissemination of evidence
- To identify Thought Leaders best positioned for your strategic objectives
- To continually monitor, measure and optimize your planning and execution

AGENDA

- Quick Introduction and Situational Analysis
- Roche Ocrevus: A Look Back at a Great Product Launch
- Workshop Exercise: Scientific Communications Post-Launch Plan
- Participant Discussion

"The industry is struggling to define what success looks like when it comes to Medical Affairs"

- Martin Barrow, EMG Gold

Source: Barrow, M; Measuring the Medical Affairs Mission.2018, 02 https://www.emg-gold.com/articles/measuring-the-medical-affairs-mission (accessed Sept 28, 2018).

"Many organizations default to quantitative assessments of productivity and efficiency to represent impact and value. While useful as metrics, over-reliance on pure quantitative approaches can result in missed opportunities to truly capture the value of MA……."

- Rob Mathias, Celgene Corporation

Source: Barrow, M; Measuring the Medical Affairs Mission.2018, 02 https://www.emg-gold.com/articles/measuring-the-medical-affairs-mission (accessed Sept 28, 2018).

So what's available today?

- Instinct
- Journal Impact Factors
- Scholarly Impact Factors
- Social Media Data
- Sentiment Analysis
- Scientometric Analytics
  - Share of Scientific Voice
  - Share of Scientific Impact

Scientometric Analytics

The study of measuring and analyzing science, technology and innovation output

Share of Scientific Voice

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- **Mentions Over Time** The collective number of times a product is noted in the medical literature and medical/scientific conferences over a period of time based on area of interest

- **Share of Scientific Voice**℠ The portion of a product's mentions out of total product mentions in the medical literature and/or medical/scientific conferences over a given period based on area of interest

Share of Scientific Impact

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- **Impact Over Time** The collective amount of impact based on a range of article level metrics created for a product when noted in the medical literature and medical/scientific conferences over a period of time based on area of interest.

- **Share of Scientific Impact SM** The portion of impact created for a product based on a range of article level metrics out of total impact created over a period of time based on the area of interest

Medical Affairs Analytics Case I :
A Look Back At A Great Product Launch Ocrevus®

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BIOTECH

BIOPHARMADIVE Deep Dive Opinion Library Events Jobs

Drug Discovery Clinical Trials M&A Regulatory Manufacturing

DIVE AWARDS

Most Impressive Drug Launch: Roche's Ocrevus

AUTHOR

Ned Pagliarulo

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PUBLISHED

Dec. 4, 2017

Why Ocrevus stands out:

First drug OK'd to treat both relapsing and primary progressive forms of multiple sclerosis

Journal Analytics For Ocrelizumab

Journals:
Share of Scientific Voice (Past 3 Yrs.)

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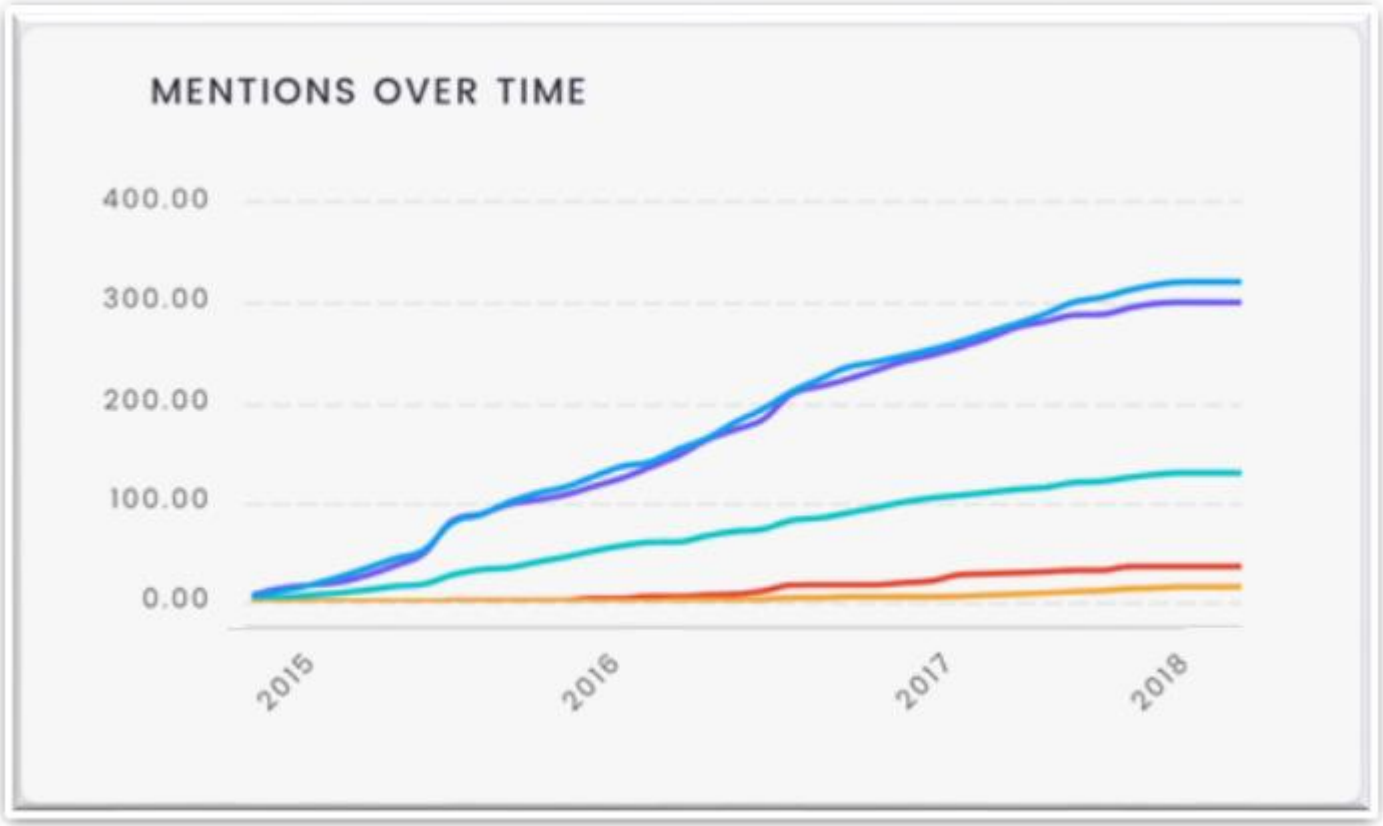

LEGEND: Ocrelizumab | Natalizumab | Fingolimod | Dimethyl Fumarate | Cladribine

Ocrevus Launch: Journals Share of Scientific Voice (12 Months)

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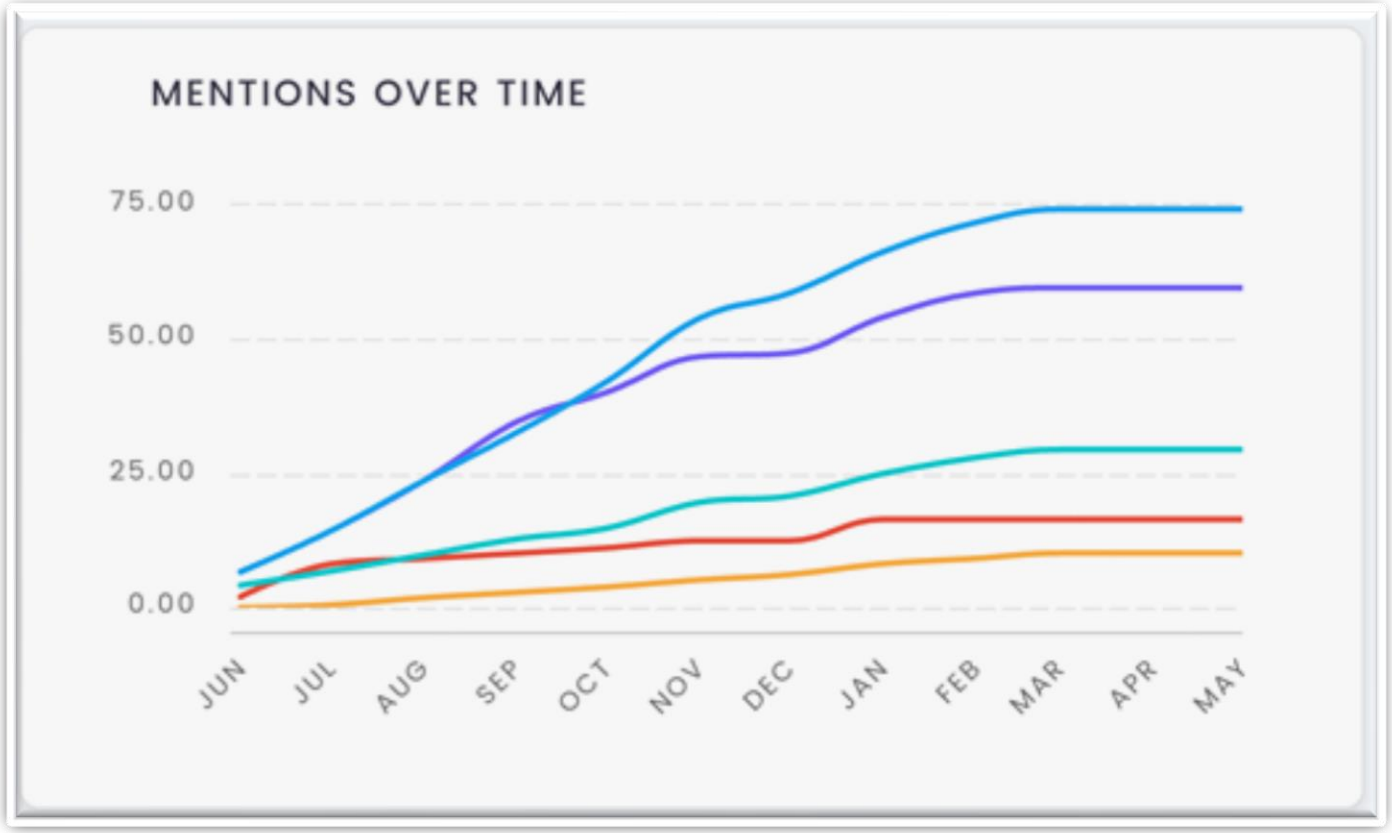

LEGEND: Ocrelizumab | Natalizumab | Fingolimod | Dimethyl Fumarate | Cladribine

Journals:
Share of Scientific Impact (Past 3 Yrs.)

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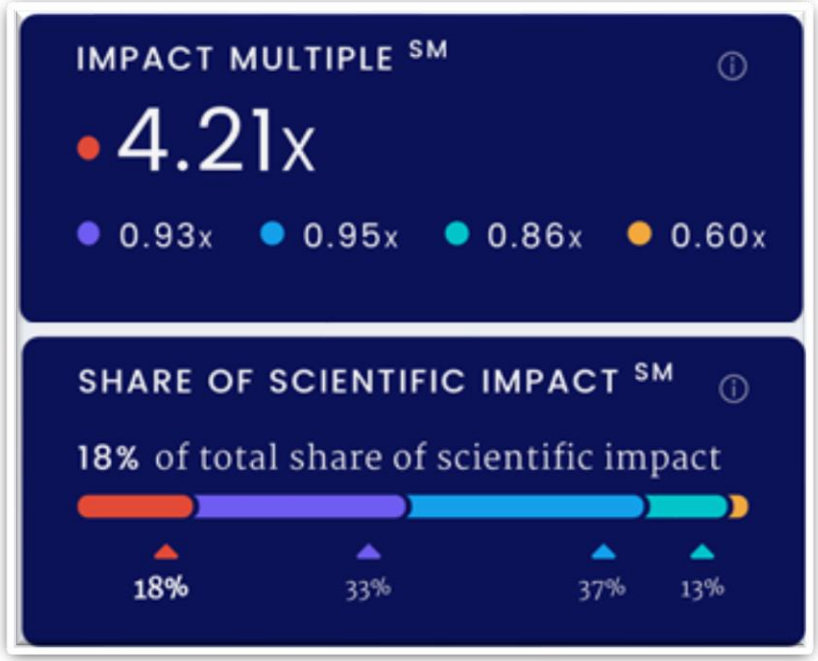

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Journals:
Share of Scientific Impact (Past 3 Yrs.)

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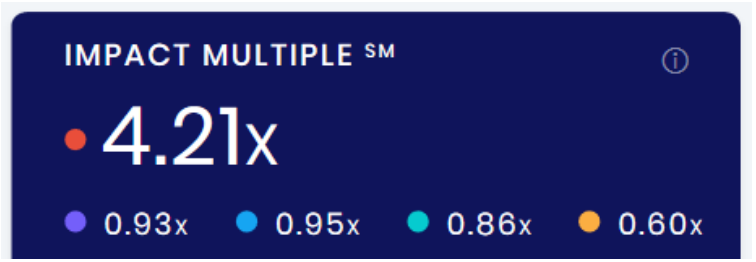

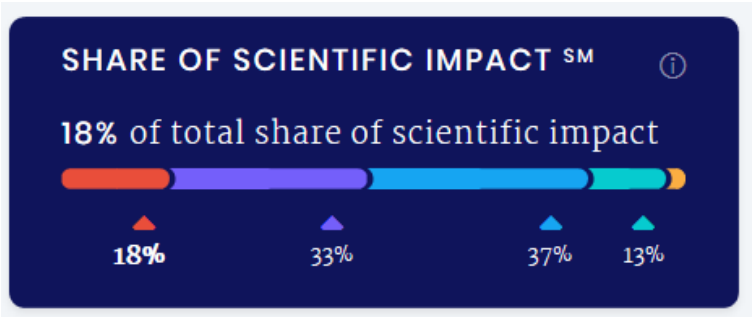

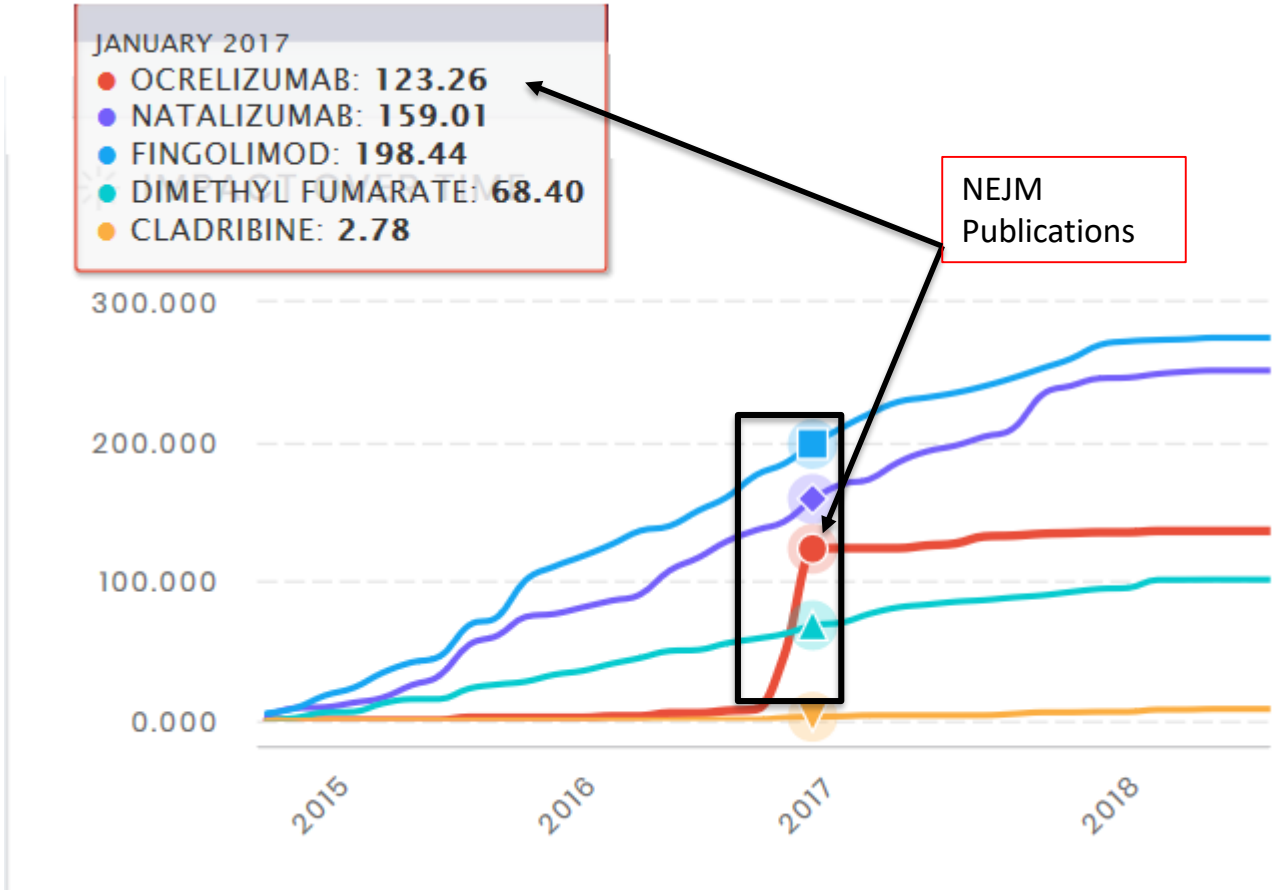

Journal Impact

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Top Ten Journal Rankings in Multiple Sclerosis (Past 3 Yrs.)

RANK	JOURNAL	IMPACT MULTIPLE℠	SOSV℠
1	Multiple sclerosis (Houndmills, Basingstoke, England)	1.11x	48% 33% 14%
2	Neurology	2.32x	65% 20% 15%
3	The New England journal of medicine	21.69x	100%
4	Annals of neurology	3.61x	79% 14%
5	The Lancet. Neurology	11.65x	75% 25%
6	Proceedings of the National Academy of Sciences of the Unit...	3.31x	25% 50% 25%
7	Multiple sclerosis and related disorders	0.56x	31% 53%
8	Journal of neurology, neurosurgery, and psychiatry	2.20x	79% 17%
9	Journal of immunology (Baltimore, Md. : 1950)	1.65x	53% 36%
10	Lancet (London, England)	13.02x	100%

Author Impact

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Top Ten Author Rankings in Multiple Sclerosis (Past 3 Yrs.)

RANK	AUTHOR	IMPACT MULTIPLE℠	SOSV℠
1	Kappos, Ludwig	4.20x	14% 24% 38% 22%
2	Montalban, Xavier	3.29x	25% 47% 23%
3	Becher, Burkhard	12.60x	N/A
4	Filippini, Graziella	14.77x	3% 20% 53%
5	Comi, Giancarlo	2.36x	11% 33% 44% 11%
6	Reich, Daniel S	3.72x	100%
7	Motl, Robert W	0.76x	N/A
8	Filippi, Massimo	1.85x	50% 50%
9	Goverman, Joan M	17.15x	N/A
10	Calabresi, Peter A	4.22x	50% 50%

Journals:
Share of Scientific Impact (12 Months)

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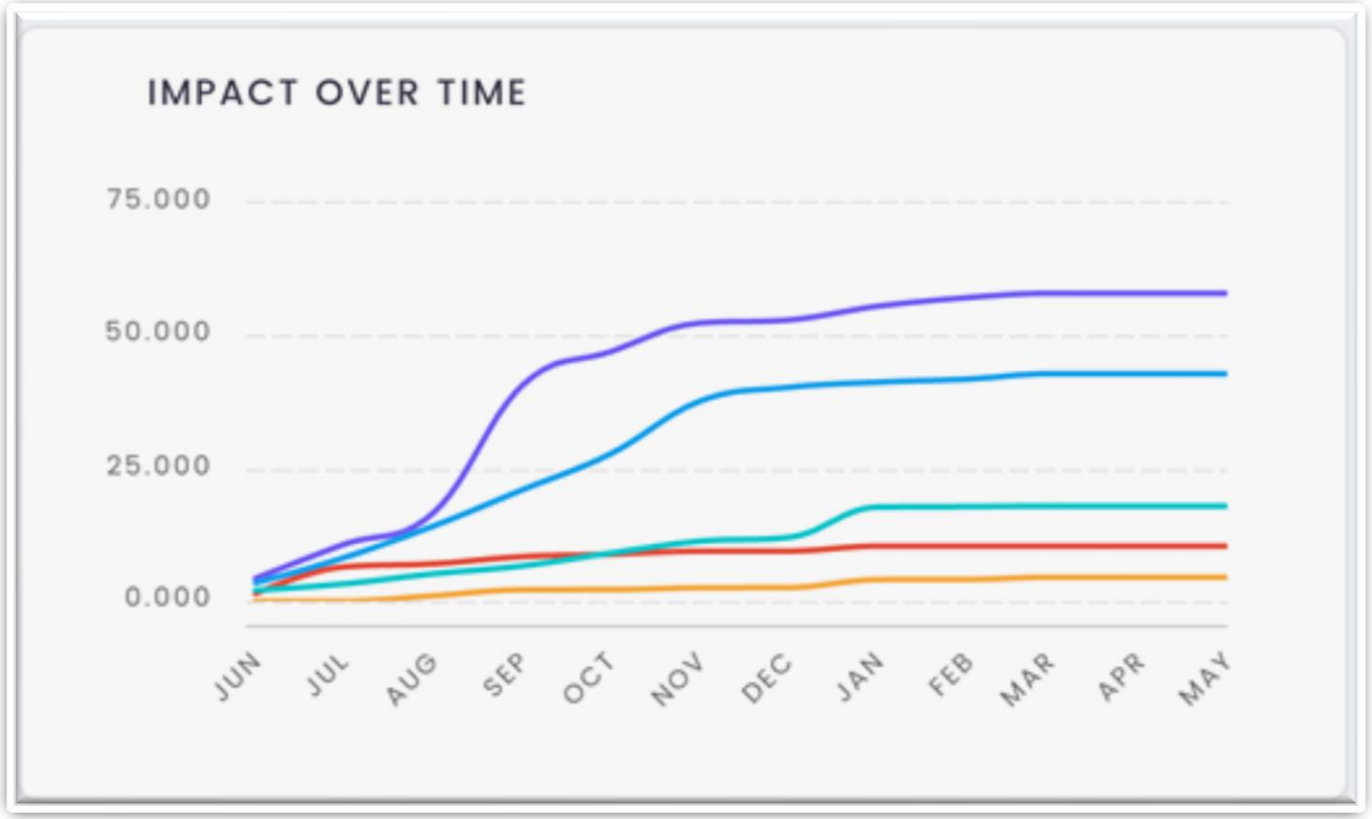

LEGEND: Ocrelizumab | Natalizumab | Fingolimod | Dimethyl Fumarate | Cladribine

Conference Analytics For Ocrelizumab

Conferences:
Share of Scientific Voice (Past 3 Yrs.)

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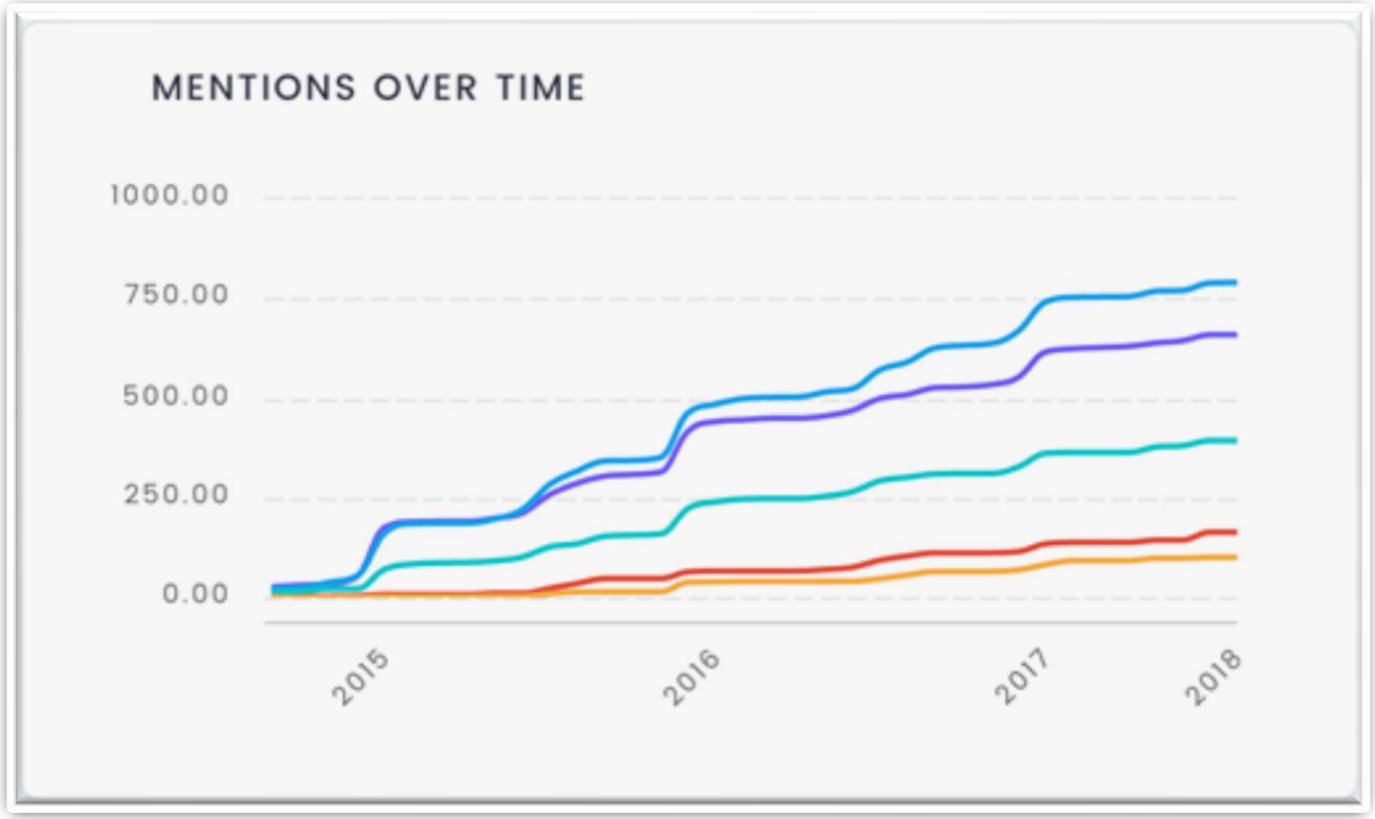

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Conferences:
Share of Scientific Impact (Past 3 Yrs.)

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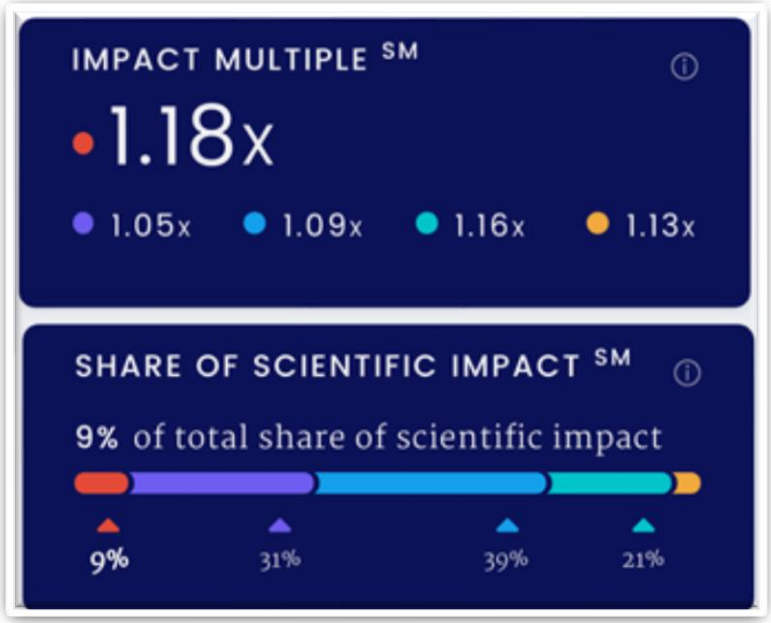

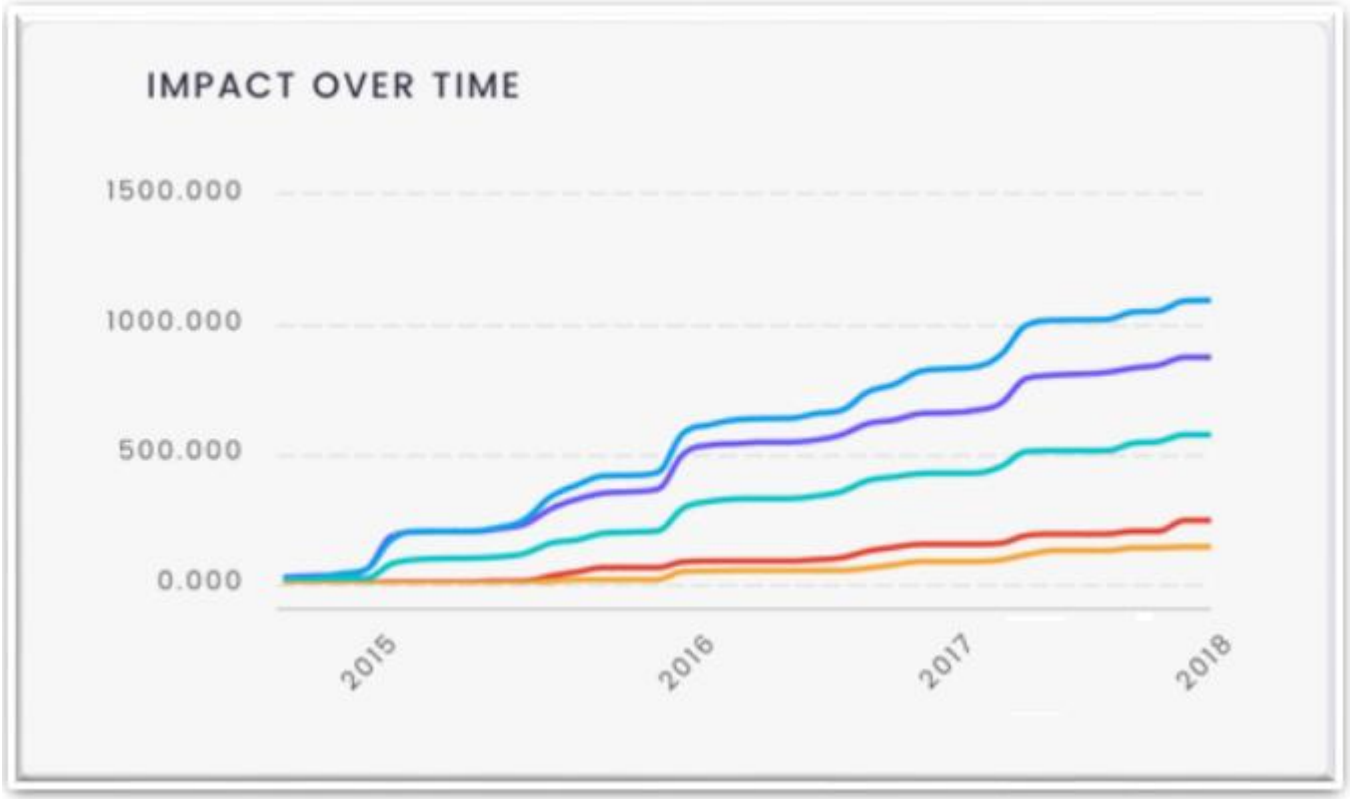

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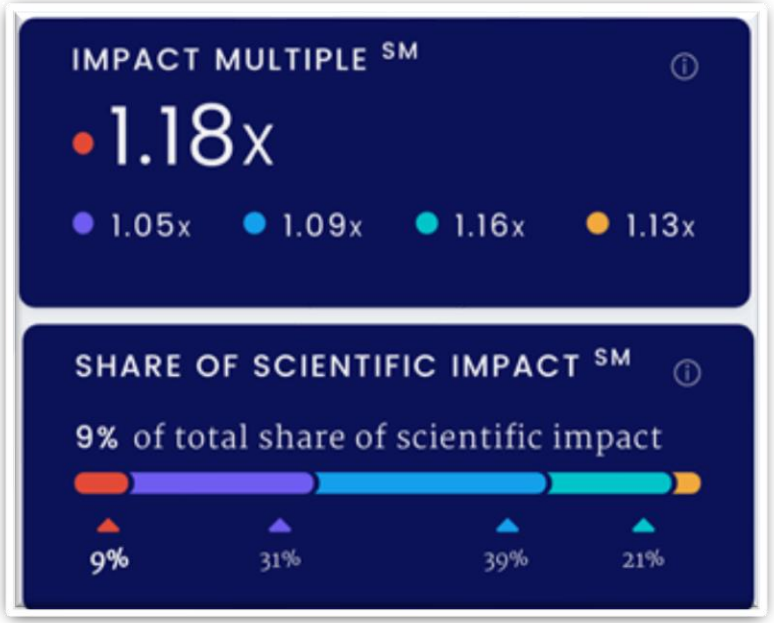

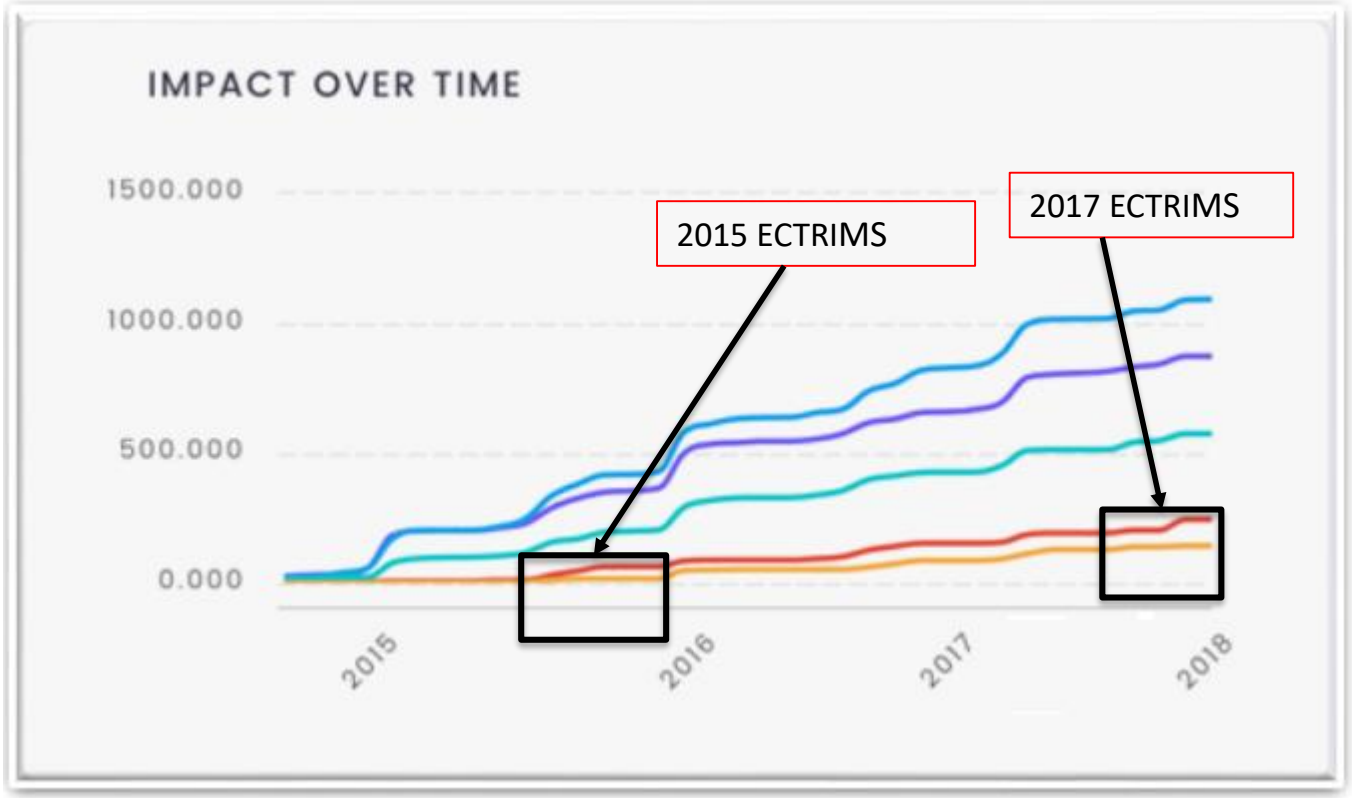

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Conferences:
Share of Scientific Voice (12 Months)

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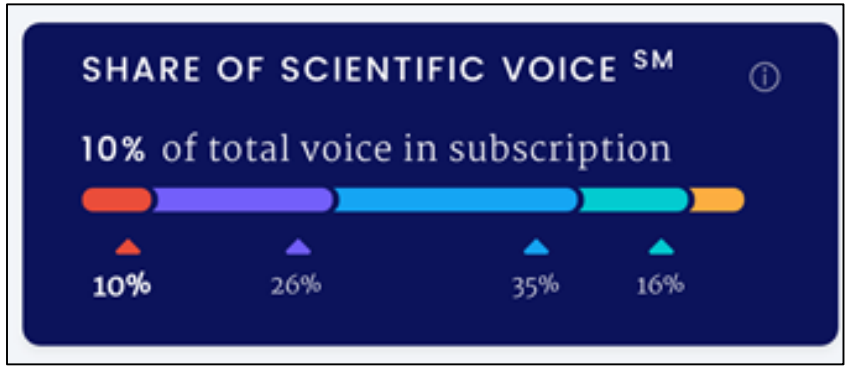

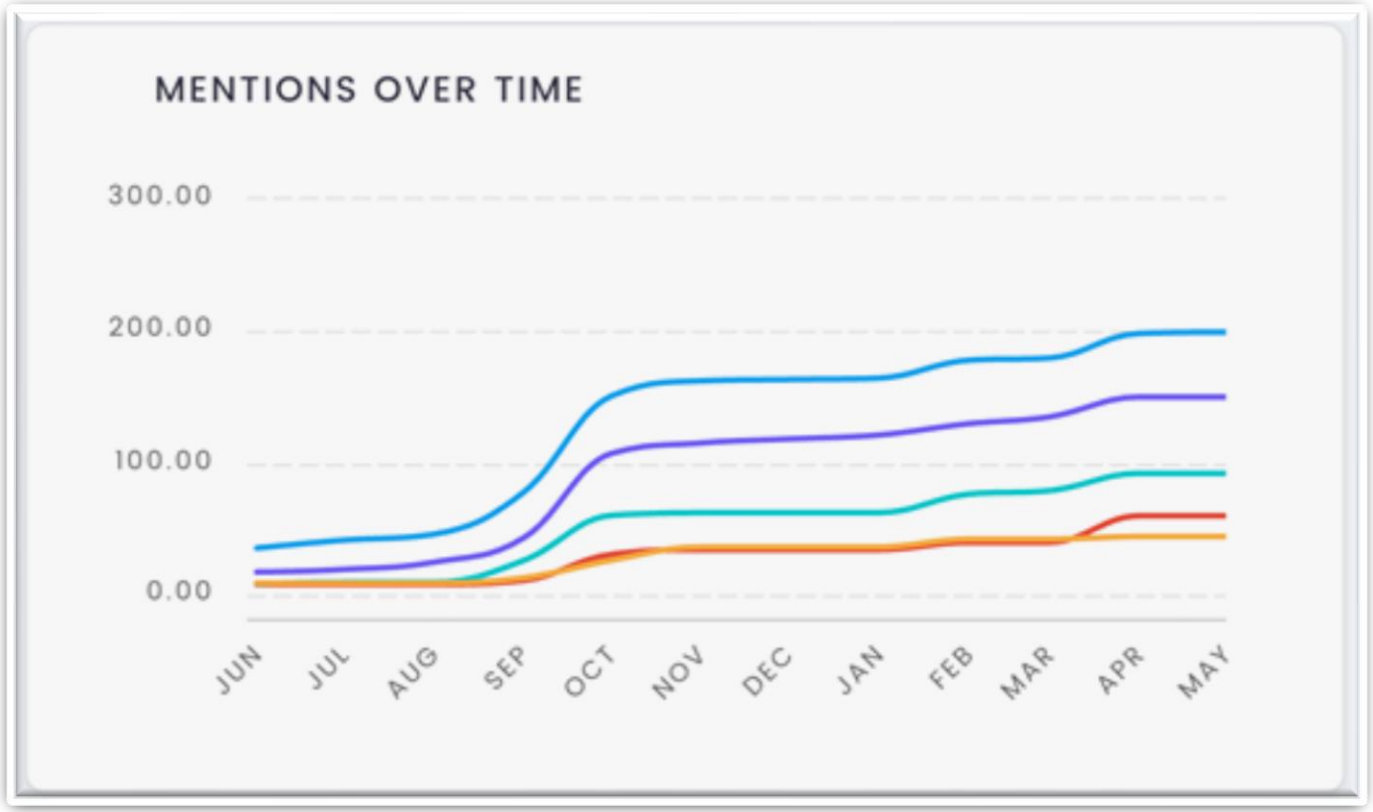

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Conferences:
Share of Scientific Impact (12 Months)

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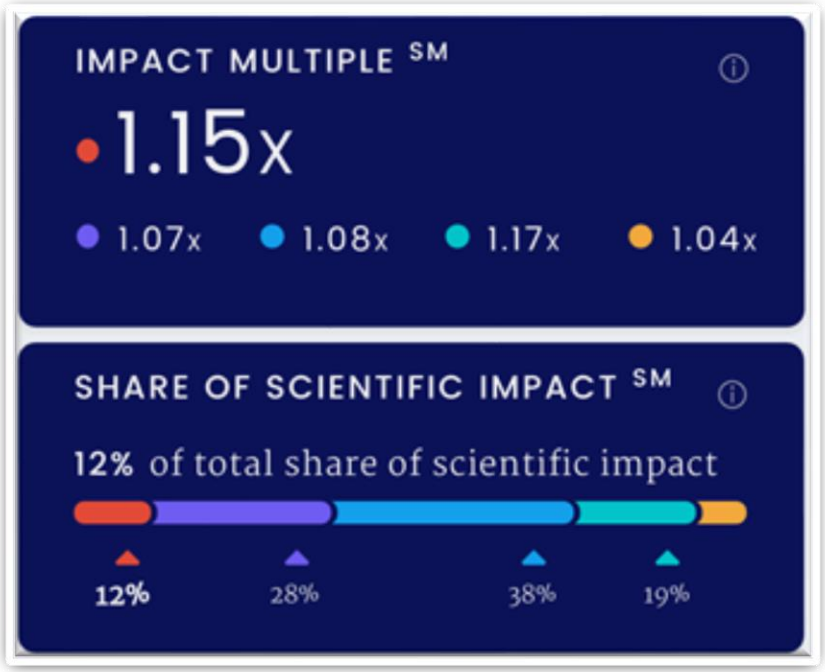

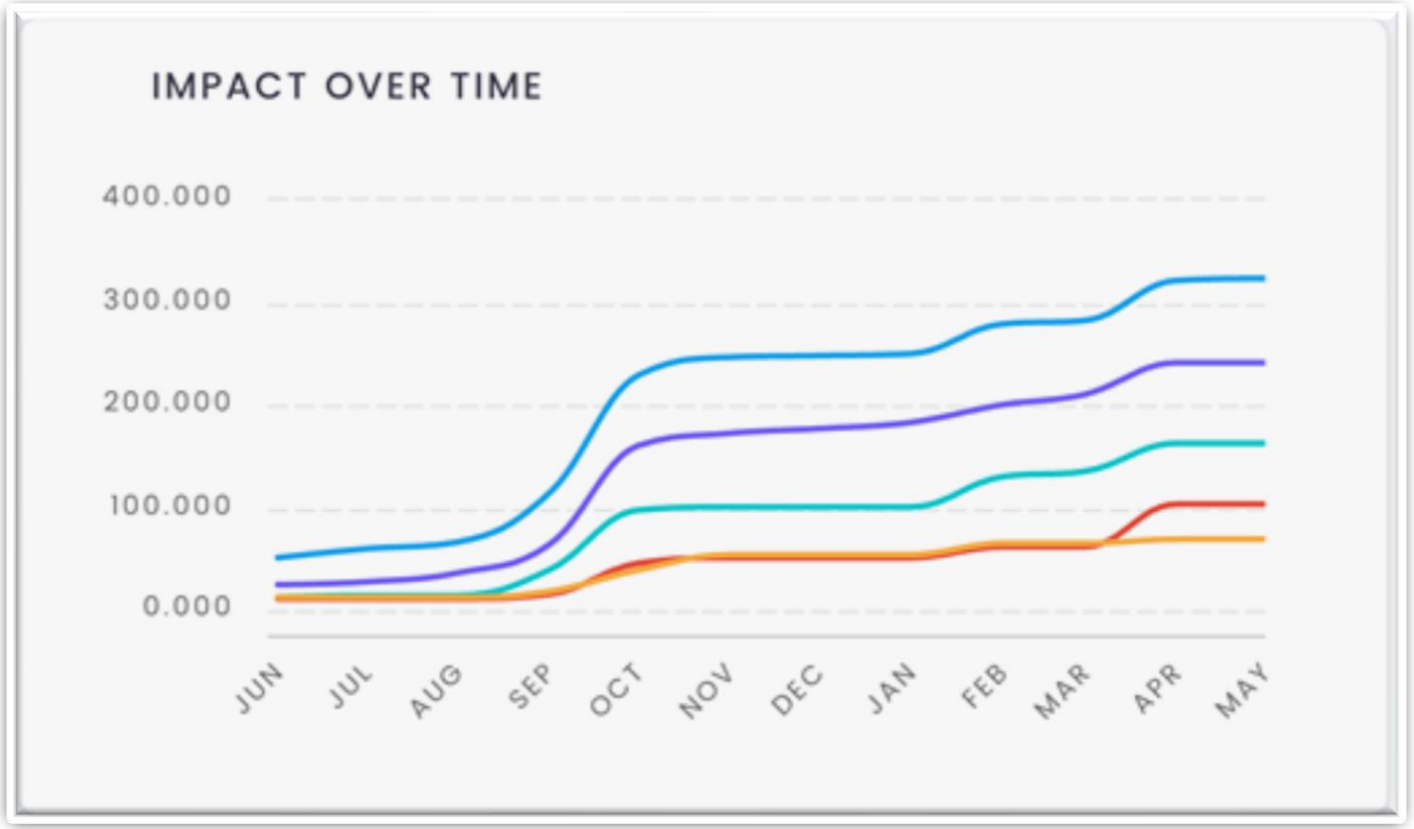

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Conferences:
Share of Scientific Impact (12 Months)

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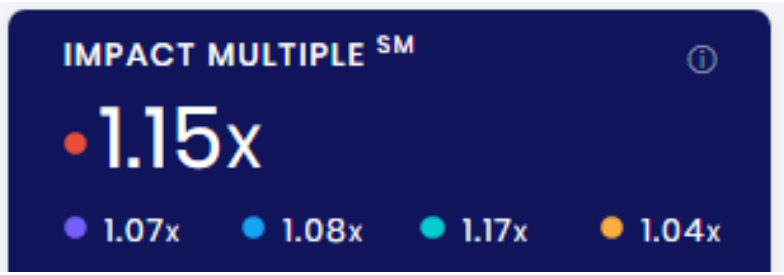

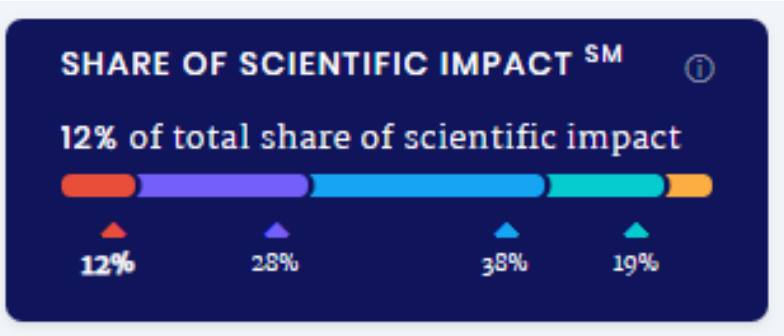

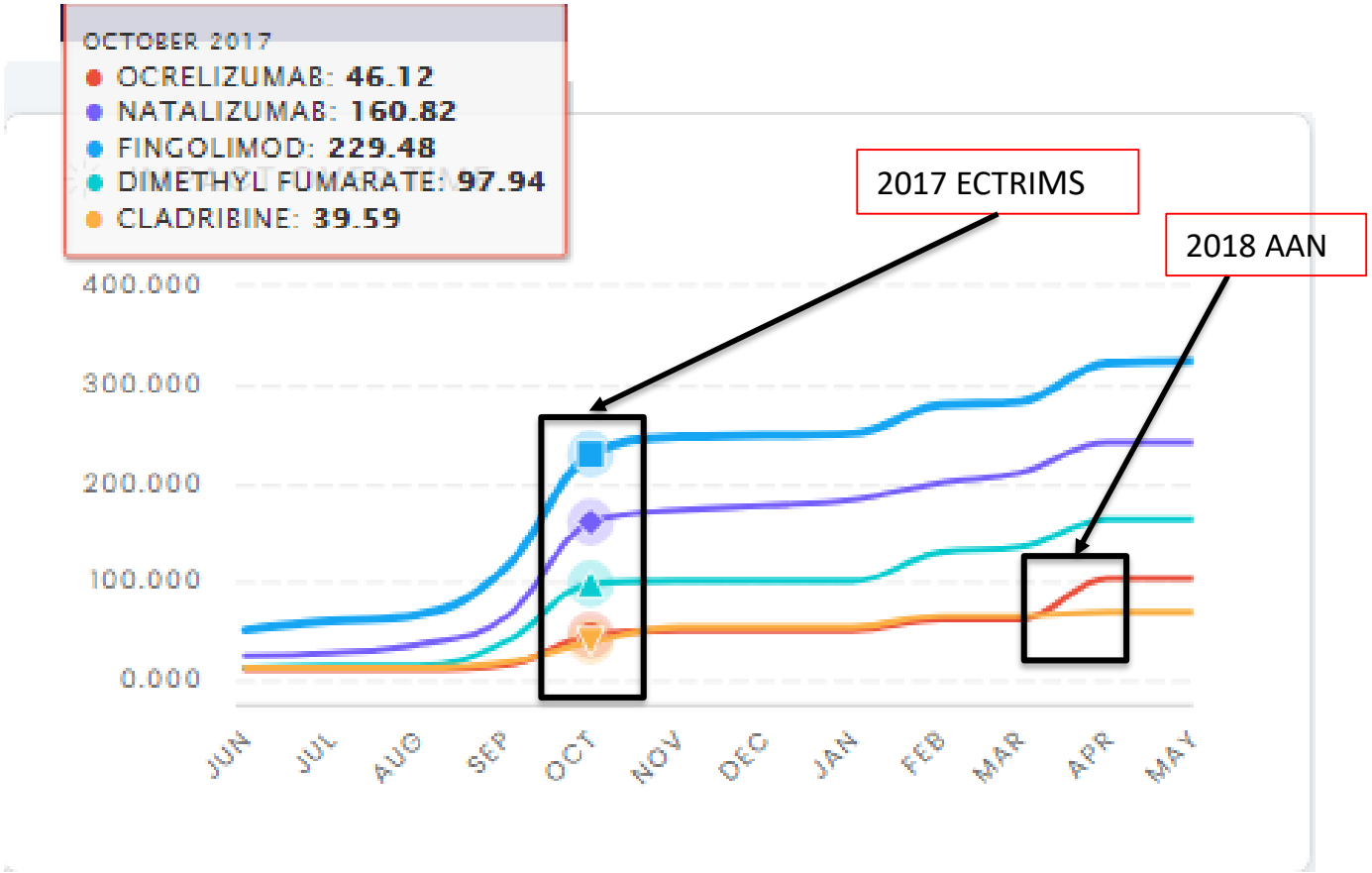

Conferences

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Top Ten Conferences Rankings in Multiple Sclerosis (Past 3 Yrs.)

MEETINGS RANKING

RANK	MEETING	IMPACT MULTIPLE	SOSV℠
1	Congress of the European Committee for Treatment and Res…	1.00x	4% 40% 33% 20%
2	Annual Meeting of the American Academy of Neurology	0.88x	9% 34% 33% 23%
3	Neuroscience Meeting of the Society for Neuroscience	0.85x	9% 77% 19%
4	World Congress of Neurology	1.25x	24% 59% 16%
5	Meeting of the European Neurological Society	0.83x	2% 42% 33% 23%
6	European Meeting on Glial Cells in Health and Disease	0.93x	38% 63%
7	Congress of the European Academy of Neurology (EAN)	1.24x	12% 27% 42% 12%
8	Congress of the Pan-Adian Committee on Treatment and Res…	1.26x	34% 36% 8%
9	Annual Meeting of the Organization for Human Brain Mapping	0.80x	50% 50%
10	International Congress of Immunology	0.91x	47% 47%

LEGEND: Ocrelizumab · Natalizumab · Fingolimod · Dimethyl Fumarate · Cladribine

Presenters

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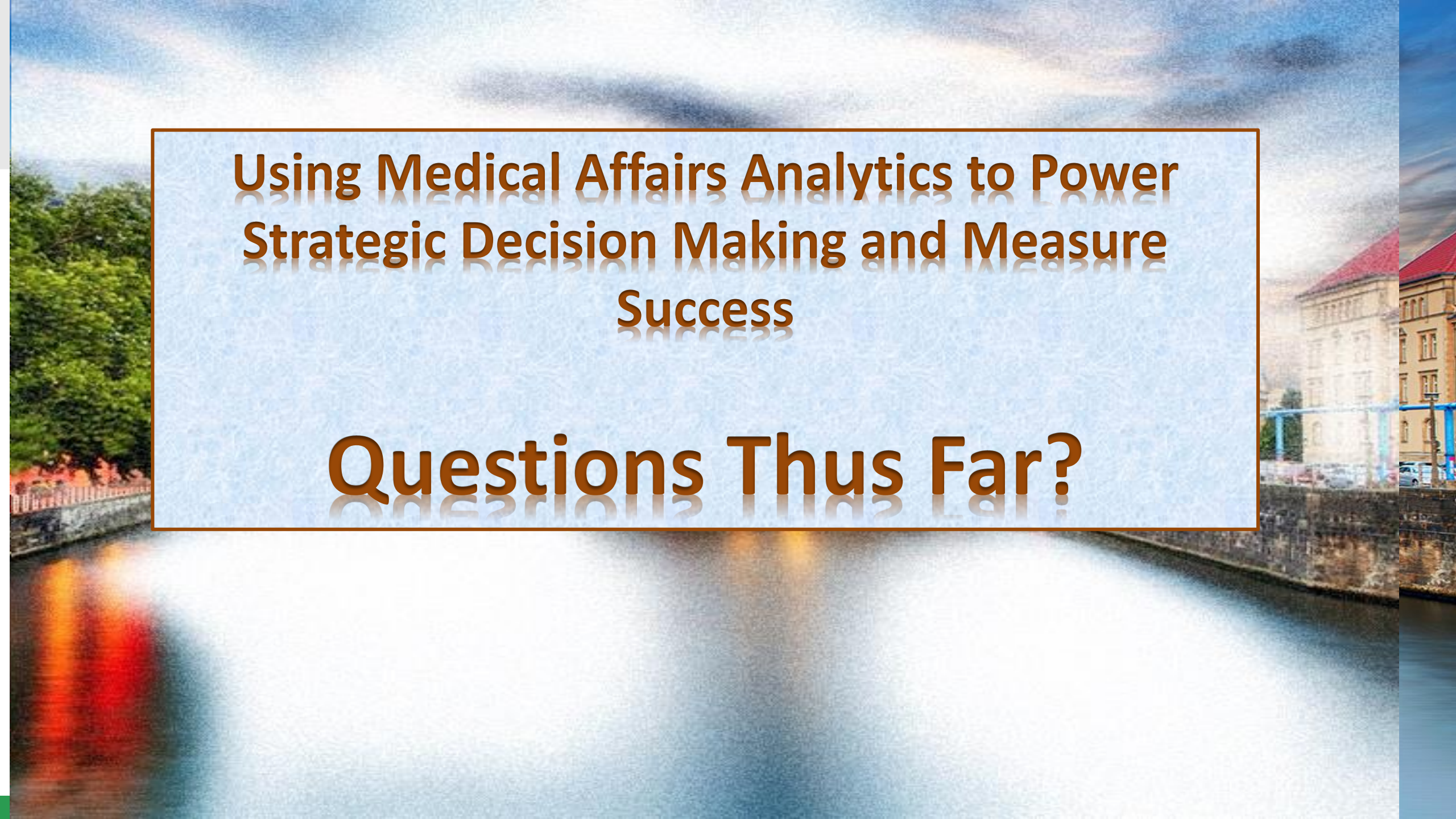
Top Ten Presenter Rankings in Multiple Sclerosis (Past 3 Yrs.)

RANK	PRESENTER	IMPACT MULTIPLE℠	SOSV℠
1	Kappos, Ludwig	1.14x	46% 11% 31%
2	Giovannoni, Gavin	1.09x	30% 19% 32%
3	Comi, G	1.01x	23% 18% 23% 32%
4	Filippi, Massimo	1.06x	37% 63%
5	Ziemssen, Tjalf	1.05x	24% 74%
6	Comi, Giancarlo	1.05x	29% 11% 24% 32%
7	Montalban, Xavier	1.09x	67% 16%
8	Phillips, Amy L	0.95x	24% 24%
9	Dangond, Fernando	1.13x	99%
10	Selmaj, Krzysztof W	1.01x	71% 13%

Did Roche used Medical Affairs Analytics to Power Strategic Decision Making and Measure Success?

- Positioned product information to maximize impact in the scientific landscape?
  - NEJM ? What is your best bank for the buck putting resources behind
- Which forums worked better than others in order to enhance the impact of dissemination of evidence?
  - Only always target the TOP Journal? Do you need conferences? What is most cost effective?
- Identified Thought Leaders best positioned for their strategic objectives?
  - Global launch, requiring globally recognized thought leaders?
- What's next in order to maximize success?
  - Continually monitor, measure and optimize planning and execution


Using Medical Affairs Analytics to Power Strategic Decision Making and Measure Success
Questions Thus Far?

Group Exercise:
Medical Affairs Analytics Case II

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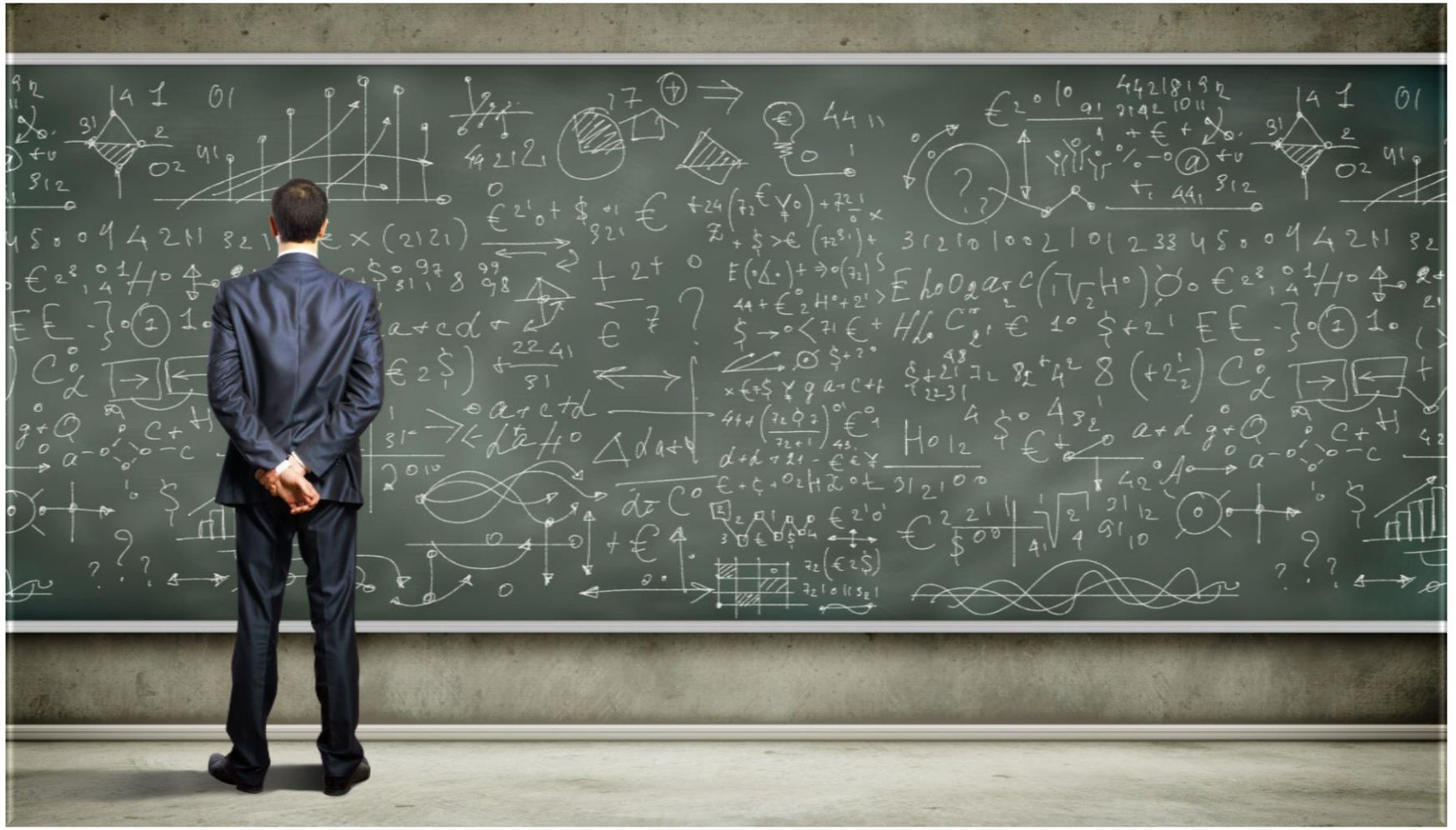

Work Shop Exercise:
Scientific Communications Post-Launch Plan

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Scenario:

- You are The Director of Scientific Communications for your company, in charge of the Dermatology TA portfolio and part of the Medical Affairs team that has just successfully launched Eczederm®, a new Rx IL4 inhibitor topically active for the treatment of Atopic Dermatitis

Work Shop Exercise:
Scientific Communications Post-Launch Plan

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Scenario (cont'd):

- Because of the unique properties of this product, your company wants to assure that evidence is communicated via the most relevant and impactful journals and meetings possible.

- It is six months post-launch and you now have three manuscripts and seven posters near completion and have been asked to reassess and optimize your publication plan.

Work Shop Exercise:
Scientific Communications Post-Launch Plan

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Scenario (cont'd):

- Manuscripts (3)
  - Two clinical, post-hoc analyses demonstrating prolonged efficacy.
  - One PK topical absorption and MOA study in psoriasis

- Posters (7)
  - 2 MOA
  - 1 HEOR
  - 2 Pediatric efficacy and tolerability
  - 2 Adult psoriasis efficacy and tolerability

Your Data For Review and Decision Making As Described In The Previous Case

Handouts

- Product Performance Dashboards for Eczederm
  - Conferences
  - Journals

- SoSV and Impact Rankings
  - Journals
  - Conferences
  - Authors
  - Presenters

Review the Scientific Landscape

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Use The Medical Affairs Analytics Data to:

- Review the dashboards for your status to-date in terms of Share of Scientific Voice and Share of Scientific Impact for:
  - Journals
  - Conferences
- Review your competitor's status to-date in terms of Share of Scientific Voice and Share of Scientific Impact
  - Have your competitors submitted to impactful journals and meetings thus far that you could increase presence and impact in for the future?
  - Which top-ten journal have you and your competitors not published in?
  - Which top-ten authors / presenters should you consider working with in the future?
  - Which top-ten conferences should you consider having a presence at and why?

Submit Your Evidence

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Use The Medical Affairs Analytics Data to:

- Determine which conferences would be best to submit your poster abstracts
  - MOA abstracts
  - Pediatric efficacy and tolerability abstracts
  - Adult psoriasis efficacy and tolerability abstracts (unapproved Indication)
  - HEOR abstract

- Determine what options you have for submitting your three manuscripts
  - Two post-hoc prolonged clinical efficacy analyses
  - One supplemental PK topical absorption and MOA study in psoriasis

Global Region | Jun 2013 - May 2018 | MEETINGS | JOURNALS | Eczederm | Fermaleukin | Atopiderm

DASHBOARD | RANKINGS

DASHBOARD - JOURNALS DATA

Below is a topline analysis of your competitive set based on your main filters above

IMPACT MULTIPLE SM

1.50x

0.77X | 0.83X

SHARE OF SCIENTIFIC IMPACT SM

45% of total share of scientific impact

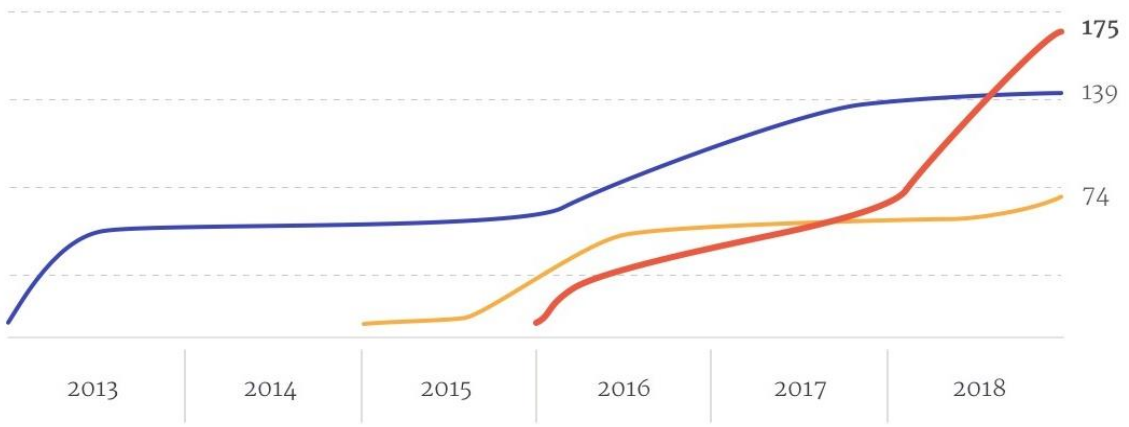
45% | 36% | 19%

SHARE OF SCIENTIFIC VOICE SM

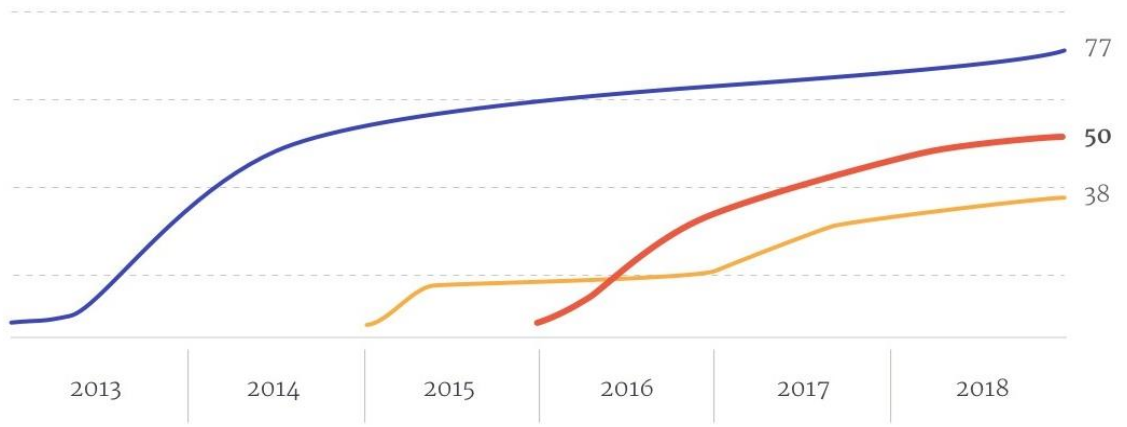
30% of total voice in subscription

30% | 47% | 23%

IMPACT OVER TIME



MENTIONS OVER TIME



Global Region | Jun 2013 - May 2018 | MEETINGS | JOURNALS | Eczederm | Fermaleukin | Atopiderm

DASHBOARD | RANKINGS

DASHBOARD - MEETINGS DATA

Below is a topline analysis of your competitive set based on your main filters above

IMPACT MULTIPLE SM

1.33x

0.85X | 0.95X

SHARE OF SCIENTIFIC IMPACT SM

36% of total share of scientific impact

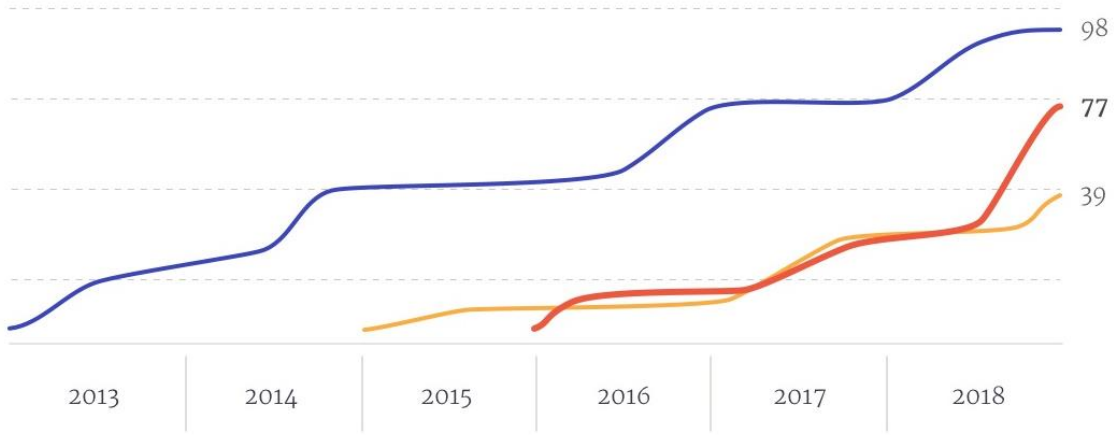
36% | 46% | 18%

SHARE OF SCIENTIFIC VOICE SM

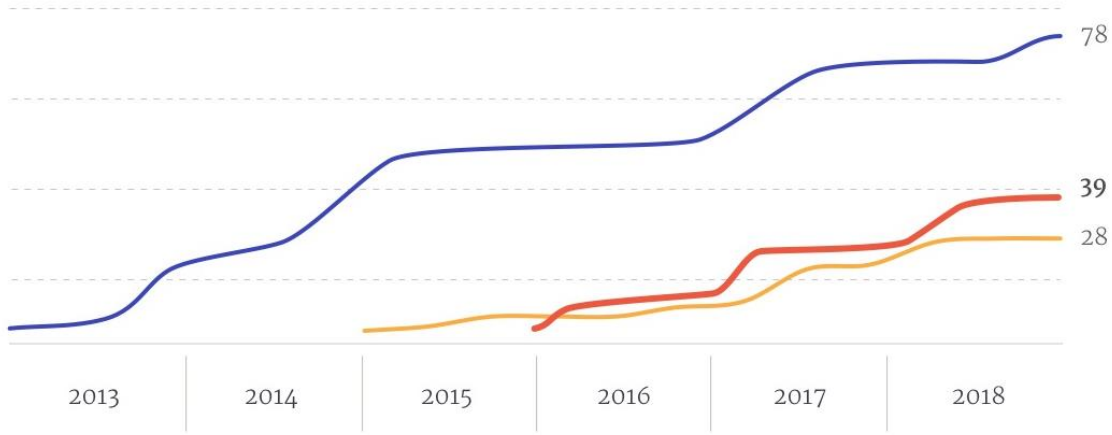
27% of total voice in subscription

27% | 54% | 19%

IMPACT OVER TIME



MENTIONS OVER TIME



JOURNALS RANKING

RANK	JOURNAL	TYPE	IMPACT MULTIPLE	SOSV℠
1	Journal of Allergy and Clin Immunology	PC/CL	3.60x	74% 21% 5%
2	British Journal of Dermatology	PC/CL	1.79x	78% 18% 4%
3	Allergy	CL/PC	1.91x	78% 12% 10%
4	Journal of The European Academy of Derm& Vir	PC/CL	1.90x	45% 45% 10%
5	Journal of the American Academy of Derm	PC/CL/PR	24.14x	15% 70% 15%
6	Nature Genetics	PC	0.64x	70% 30%
7	Nature Reviews: Immunology	PC	1.39x	60% 20% 20%
8	Contact Dermatitis	PR/CL/MC	1.37x	25% 61% 14%
9	Clinical and Experimental Allergy	PC/CL	1.49x	
10	Pediatric Allergy and Immunology	PE/CL	1.09x	29% 71%

LEGEND: Eczederm | Fermaleukin | Atopiderm

PC=Pre-Clinical
CL= Clinical
PR=Practice
MC=Managed Care
PE=Pediatric

AUTHORS RANKING

RANK	AUTHOR	TYPE	IMPACT MULTIPLE	SOSV℠
1	Mikael Ebbo	TR	43.91x	100%
2	Eric Vivier	TR	43.91x	100%
3	Kenji Kabashima	TR	4.61x	
4	Jonathan Ian Silverberg	TR	1.21x	32% 56% 12%
5	Frederic Vely	PC	43.91x	100%
6	Adeline Crinier	PE/TR	43.91x	10% 81% 9%
7	Jacob Pontoppidan Thyssen	TR	1.45x	58% 22% 20%
8	Emma Guttman-Yassky	PE/TR	2.17x	20% 80%
9	Michael Williams	CL/MC	15.32x	74% 26%
10	Richard Louis Gallo	TR/MC	15.32x	31% 40% 29%

LEGEND: Eczederm | Fermaleukin | Atopiderm

PC=Pre-Clinical
CL= Clinical
TR=Translational
MC=Managed Care
PE=Pediatric

MEETINGS RANKING

RANK	MEETING	TYPE	IMPACT MULTIPLE	SOSV℠
1	Ann Meeting of the Int Soc Investigative Derm	PC	1.01x	37% / 58% / 5%
2	Congress of the Euro Acad of Derm and Vener	PR/CL	1.11x	40% / 60%
3	Ann Congress of Euro Acad of Aller & Clin Derm	PR/CL	1.38x	100%
4	Ann Meeting of the Amer Acad of derm	PC/PR/MC/CL	0.81x	58% / 30% / 12%
5	Ann Meeting of the Amer Acad of Allerg Asthma	PC/CL/PR	1.23x	15% / 60% / 25%
6	Ann Meeting of the Euro Soc of Dermatologists	PR/MC/CL	1.08x	100%
7	World Congress of Pediatric Dermatology	PC/PE/CL	1.19x	38% / 62%
8	World Conference on Itch	PC/CL/PR	1.08x	20% / 55% / 25%
9	Ann Meeting of the British Assoc of Derms	PR/MC/CL	0.82x	
10	45th annual meeting of the Assoc for Derms	PR/MC	1.13x	29% / 71%

LEGEND: Eczederm | Fermaleukin | Atopiderm

PC=Pre-Clinical
CL= Clinical
PR=Practice
MC=Managed Care
PE=Pediatric

PRESENTER RANKING

RANK	PRESENTER	TYPE	IMPACT MULTIPLE	SOSV℠
1	Jonathan Ian Silverberg	TR	1.06x	63% / 30% / 7%
2	Emma Guttman-Yassky	PE/TR	1.07x	10% / 90%
3	Eric Lawrence Simpson	PC	1.07x	
4	Laurent Eckert	TR	1.01x	32% / 46% / 22%
5	Abhijit Gadkari	PC	1.05x	100%
6	Katrina Elaine Abuabara	TR	1.13x	10% / 81% / 9%
7	Gianluca Pirozzi	TR	1.10x	22% / 58% / 20%
8	Neil Graham	PC	1.10x	79% / 21%
9	Gil Yosipovitch	CL/MC	1.00x	74% / 26%
10	Laurent Misery	TR/MC	0.94x	40% / 60%

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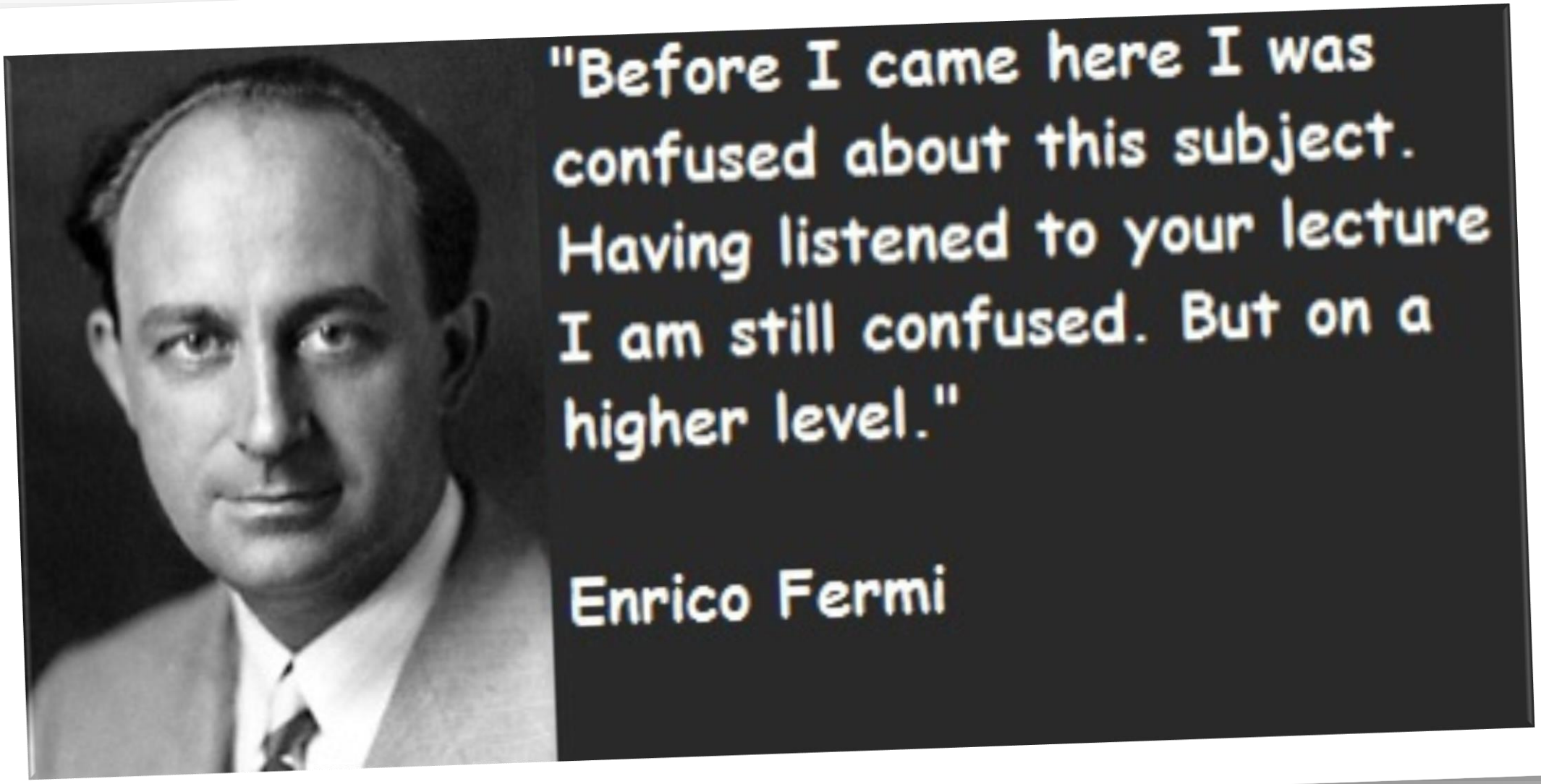
Your Evidence

- Manuscripts (3)
  - Two clinical, post-hoc analyses demonstrating prolonged efficacy.
  - One PK topical absorption and MOA study in psoriasis

- Posters (7)
  - 2 MOA
  - 1 HEOR
  - 2 Pediatric efficacy and tolerability
  - 2 Adult psoriasis efficacy and tolerability

Medical
Affairs
Analytics
Irrefutably, Dr. Avogadro!
So, Dr. Pythagoras, Maximizing Impact of Our Evidence By Analysis of Medical Affairs Analytics is Easy!
Indubitably!

Discussion


"Before I came here I was confused about this subject. Having listened to your lecture I am still confused. But on a higher level."
Enrico Fermi