SOCIAL INTELLIGENCE IN PHARMA

Physician and HCP Perspectives

Breaking Down the Online Commentary Related to the FDA's Approval of ADUHELM™ (aducanumab)

Ipsos Healthcare Advisory | Ipsos Healthcare Social Center of Excellence

Authors:
Steve Reeves,
Pete Duncan,
Michele Drennen,
Jackson Lambert

GAME CHANGERS

Ipsos

Pharma marketers are advancing and rethinking digital strategies, reworking relationships with healthcare providers and patient influencers, and advancing digital videos and one-to-one targeting."
—FiercePharma

About This White Paper

With the recent approval of ADUHELM™ has come an influx of online commentary that extends across the wider Alzheimer's digital ecosystem. Ipsos Healthcare, in partnership with our Social Intelligence Center of Excellence and therapeutic area experts, **developed a three-part series** that examines the cumulative effect of online views and voices that have arisen as a result of this major market event. This paper will highlight the HCP and physician point of view.

Setting the Stage

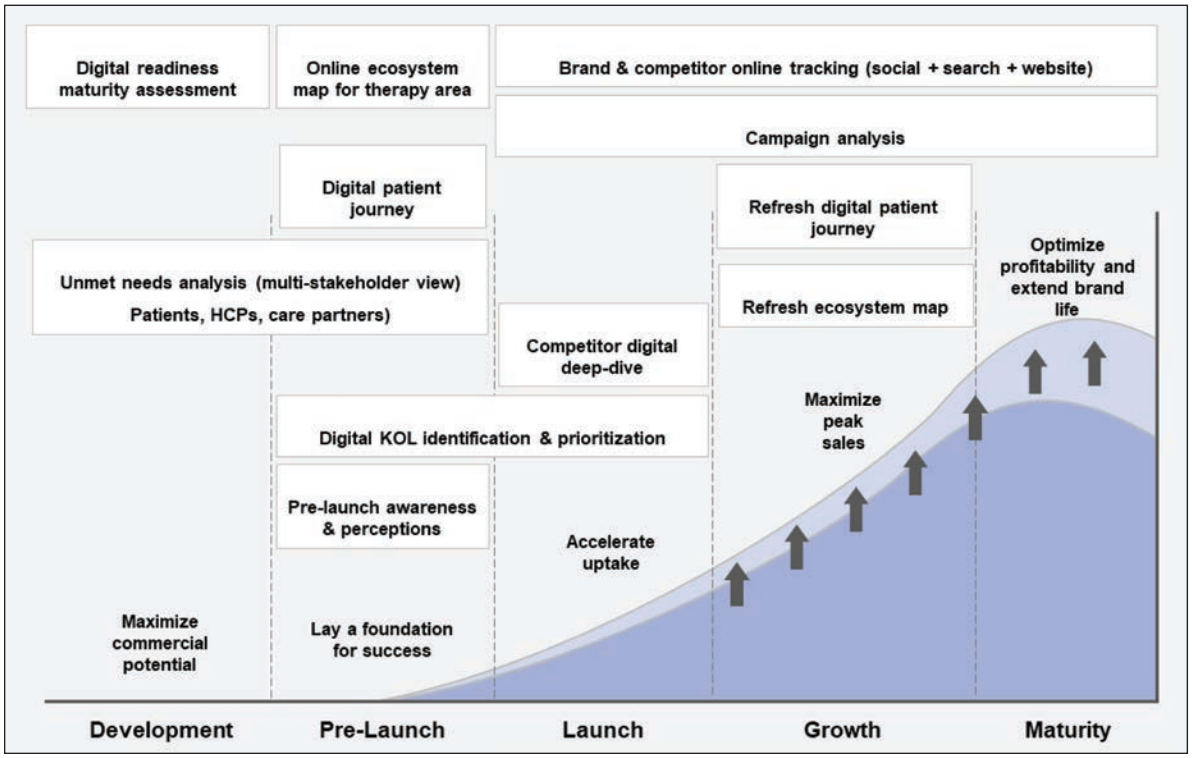
In the past several years, a sizable increase has been notable in the use of social data and online channels for research by the pharmaceutical, biotechnology and MedTech industries. At Ipsos Healthcare, we call this Social Intelligence Analytics (SIA), which is a key component of a larger set of "digital readiness" solutions.

"Digital readiness"* is defined as *"the preparation and planning a therapy area franchise or brand includes in their launch planning and commercialization strategies to reach patients, caregivers, physicians and other healthcare stakeholders online more effectively."

Social intelligence Analytics (SIA) within healthcare, is wholly about understanding the unprompted views, mindsets, decision drivers, emotional characteristics and digital behaviors of healthcare stakeholders. It's also about understanding the dynamics of the wider therapeutic category online, how healthcare information is disseminated, how it impacts decisions, and—most importantly—what organizations can do to harness this massive amount of information sometimes referred to as the world's largest focus group.

As depicted in the following chart, the utilization of social data and social intelligence frameworks is best done in a systematic, strategic fashion, in alignment with wider commercialization and launch-planning milestones. Since social intelligence offers a variety of stakeholder vantage points, much can be done leading up to launch, but even more once a drug is approved and enters the market. We see accelerated investment in this kind of research starting 18 months pre-launch.

Key Tenets of an Impactful Social Intelligence Program



Did you know that according to Pew Research, 74% of internet users engage on social media, and that 80% of those internet users are specifically looking for health information?

Digital readiness, for which social intelligence is a key part, is the preparation and planning a therapy area franchise or brand includes in their launch-planning and commercialization strategies to reach patients, caregivers, physicians and other healthcare stakeholders online more effectively."

Steve Reeves, Vice President, Healthcare Digital Strategy & Social CoE Head—North America

Breaking Down the ADUHELM™ Launch & Mapping the Online Ecosystem

To illustrate how social data can quickly unearth perspectives from a variety of healthcare stakeholders in near-real time, Ipsos Healthcare Advisory, in partnership with our Healthcare Social Intelligence Center of Excellence and Alzheimer's therapy area experts, sought to break down the recent response to ADUHELM approval, which we will continue to track on an ongoing basis.

"Alzheimer's disease impacts not only the patient, but all those who love and care for that individual as well. As patients lose their sense of self, caregivers lose their loved ones a little bit at a time. It's painful—and cruel—as they know it's going to get worse. For years, these multitudes have been holding on to the hope of a disease-modifying intervention. While previous treatments focused on the symptoms, the initial approval of ADUHELM™ represented the breakthrough many had been hoping and praying for."

Michele Drennen, Qualitative Strategist, Ipsos Healthcare—North America

In a landmark decision on June 7, 2021, the FDA approved the use of ADUHELM (aducanumab) for the treatment of early-onset Alzheimer's. There have been a variety of differing opinions and observations on the decision, the potential implications for future early stage Alzheimer's therapies, and the nature of the relationship that exists between pharma, the FDA and key healthcare stakeholders, like patients and patient advocacy groups.

Many of these observations revolve around the inner machinations of the drug approval. Patients and caregivers are struggling to understand "accelerated approval pathways" and "surrogate endpoints," along with what the label means for themselves or a loved one, or what cost they put on potential benefits. As a result, we're seeing that some hope may have been dampened, but not extinguished, from the early-stage online conversation.

Methodology Detail

The guiding questions behind the analysis were the following:

What is the perception of ADUHELM™ online across differing audiences, whether they be patients, physicians, advocacy groups or other HCPs? Further, what is the material impact of the ADUHELM news on the wider Alzheimer's therapeutic category online?

Methodologically, we began by utilizing our social data-gathering platform Synthesio (recently named Leader in Forrester Wave AI-Enabled Consumer Intelligence Platforms study) to harness three years of historical data on aducanumab and ADUHELM throughout a wide variety of digital channels, including Twitter, YouTube, Reddit, forums, blogs and online news sources. Additionally, we explored Alzheimer's advocacy group pages and public Alzheimer's and dementia-related forums.

In addition to a three-year historical pull of aducanumab/ADUHELM data, we also developed a broader query to harvest general Alzheimer's therapeutic category data. The data was used to size the wider Alzheimer's landscape online and assess the scale and impact of the ADUHELM news on the broader community.

Lastly, we conducted a time-series analysis of highest concentration of online commentary related to ADUHELM, which was three weeks prior to approval, and three weeks following approval. Though the story continues to shift as time goes on, this analysis provides a solid baseline of the key trends, perceptions and prominent voices connected to the approval.

Moving from static information to insights and finally to intelligence, we utilized a proprietary set of taxonomies (think of them as lenses) that were applied to the data to isolate different stakeholder groups for further study (physicians, industry analysts, patients, patient advocacy groups and caregivers).

The total data corpus included over 185,000 mentions of aducanumab/ADUHELM across a variety of social and digital channels, and over 11 million mentions of Alzheimer's (both clinical and lay terms) to size the overall AD therapeutic category online.

Ipsos gathered data globally across more than 25 markets, including the U.S., Germany, Italy, Canada, Spain, France, Australia, India, China, Brazil, Japan and others.

Time frame	Aducanumab Volume	Alzheimer's Volume
Last three years	N = 185,489 online mentions	N = 11,316,449 online mentions
Three weeks pre approval	N = 5,267 online mentions	N = 309,812 online mentions
Three weeks post approval	N = 76,056 online mentions	N = 464,483 online mentions

Leading Voices in the Physician & HCP Community Online

Resoundingly, commentary from the wider HCP audience online drew frustration, disbelief and a certain degree of distrust for the FDA's process in this case (see Exhibit A). This is a stark contrast from the patient sentiment post approval (see patient white paper), as patients were much more welcoming and hopeful about the FDA's approval of ADUHELM™. One trend consistent with patients and caregivers was the positivity rate over time. In the weeks following FDA approval, the proportion of positive to negative posts decreased dramatically.

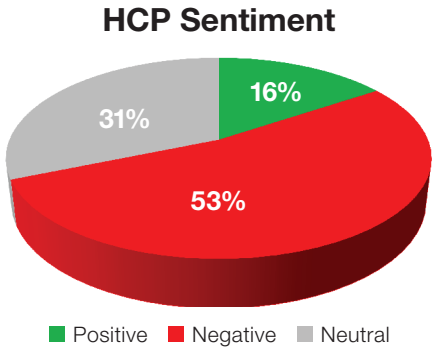


Exhibit A: HCP sentiment towards ADUHELM

There was a visible increase in negative sentiment among physicians from week 1 to week 3 following the ADUHELM approval. Week 1 (75% negative) to week 2 (80% negative) and week 3 (100% negative).

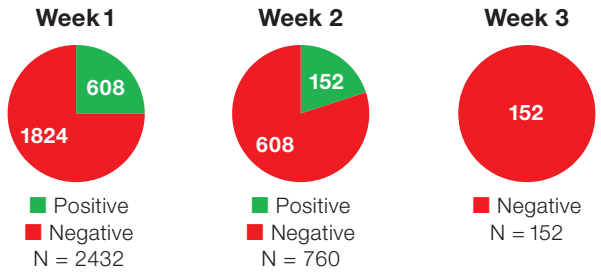


Exhibit B: HCP sentiment change in weeks following FDA approval

Physicians across a spectrum of specialities took to social media to express their opinions, from neurologists to psychiatrists, medical ethics professionals, geriatrics specialists and more. Ipsos observed physicians from several different markets. As shown in Exhibit C, many of the HCPs with the greatest volume of ADUHELM posts and most interactions on those posts weren't necessarily doctors working with Alzheimer's patients. This wide array of HCPs responding to the FDA approval demonstrates the importance of the news. Not only was it a milestone approval for Alzheimer's, but for the healthcare field on the whole.

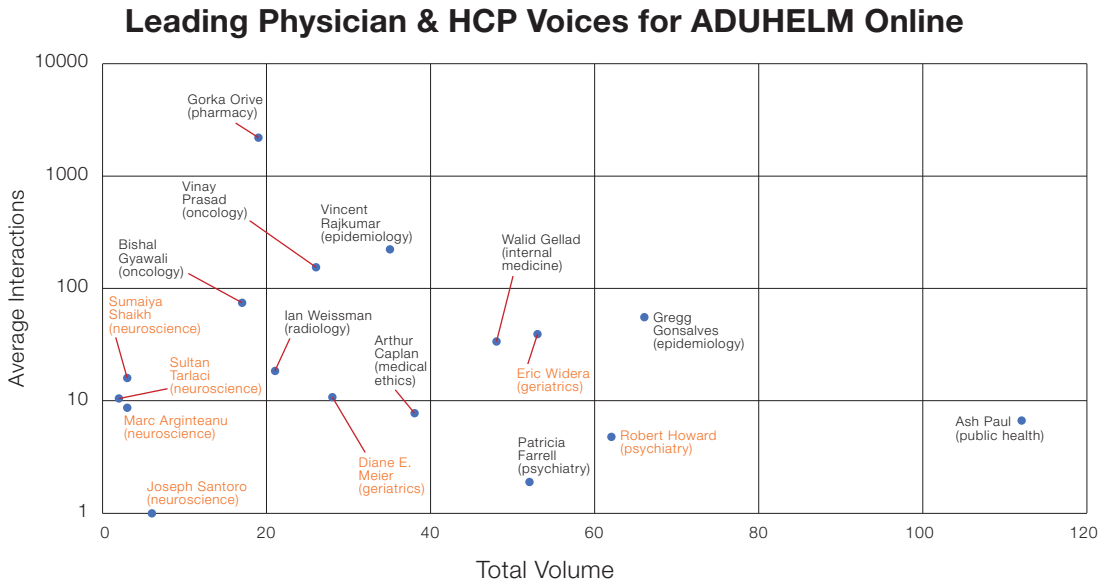


Exhibit C: Leading Physician and HCP voices talking about and sharing information related to approval of ADUHELM

Leading Physician & HCP Voices for ADUHELM™ Online

> *@maidment_dr NHS will be guided by NICE in deciding if aducanumab (at over $50k per year drug costs, plus costs of PET, monitoring MRIs, infusion centers, etc.) is cost-effective. Given that the best case scenario from the data shows about 50% of donepezil's effect, I can't see NICE approving.*
>
> *—Prof. Robert Howard*

> *A new weapon against the brain scourge: Alzheimer's disease. First new treatment in almost 20 years, Biogen has produced aducanumab (ADUHELM) which fights the toxic brain protein beta amyloid https://www.cnbc.com/2021/06/07/fda-approves-biogens-alzheimers-drug-the-first-new-therapy-for-the-disease-in-nearly-two-decades.html.*
>
> *—Dr. Marc Arginteanu*

Concluding Thoughts

Clearly the approval of ADUHELM drove much commentary from HCPs and physicians, and the participation seen by this group online begs the question: What is the impact of the physician voice online in shaping the mindset of other physicians and importantly shaping the perspectives of patients? Ipsos observed that patients and caregivers (see patient and caregiver paper in this series) began with 65% overall positivity following the approval, and quickly dropped in week 2 following approval to 60% and further reduced to 50% positivity in week 3. We suspect this was driven by two things online: the high number of negative news stories and the frequency of negative commentary by physicians online. If true, this would serve to show the important role that physicians and HCPs play in the dissemination of information online, which should be a consideration point in the KOL and digital opinion leader (DOL) strategies pharma develops.

If interested in receiving customized social intelligence analysis on Physicians and HCPs, please contact Steve Reeves at steve.reeves@ipsos.com.

About the Authors

Steve Reeves
VP, Healthcare Digital Strategy & Co-Lead of
Ipsos Healthcare Social Intelligence CoE
steve.reeves@ipsos.com

Pete Duncan
Data Scientist & Co-Lead of
Ipsos Healthcare Social Intelligence CoE
peter.duncan@ipsos.com

Michele Godby Drennen
SVP, Ipsos Healthcare
michele.drennen@ipsos.com

Jackson Lambert
Ipsos Healthcare Intern
Notre Dame School of Engineering
jackson.lambert@ipsos.com

About Ipsos

At Ipsos we are passionately curious about people, markets, brands, and society. We deliver information and analysis that makes our complex world easier and faster to navigate and inspires our clients to make smarter decisions. With a strong presence in 90 countries, Ipsos employs more than 18,000 people and conducts research programs in more than 100 countries. Founded in France in 1975, Ipsos is controlled and managed by research professionals.