Editorial

Introducing Alzheimer’s & Dementia: Diagnosis, Assessment & Disease Monitoring, an open access journal of the Alzheimer’s Association

Welcome to the inaugural issue of Alzheimer’s & Dementia: Diagnosis, Assessment & Disease Monitoring (DADM) (http://ees.elsevier.com/dadm/default.asp), an open access journal of the Alzheimer’s Association. The journal will concentrate on new research that reports the discovery, development, and validation of assays, instruments, technologies, and algorithmic approaches leading to the accurate detection and tracking of individuals at risk of progressive dementing diseases. The reports to be published in this journal will cover a range of topics focused on the early and accurate detection of individuals with memory complaints and/or asymptomatic individuals at elevated risk of various forms of memory disorders. All forms of biomarkers will be considered, ranging from gene expression and proteomic markers, to imaging, cognitive and functional markers of disease progression or treatment response.

The launch nearly 1 decade ago of Alzheimer’s & Dementia: The Journal of the Alzheimer’s Association (A&D) increased the capacity for “translational knowledge” in the field. A&D has invested many editorial pages spanning translational topics, including imaging [1,2], genetics [3–11], diagnostic instrumentation and development [12–16], biomarker discovery [17–24], and biomarker validation [25–32]. A&D has focused specifically on the limitations of prevailing paradigms and research challenges that will spur therapy development. As the field continues to grow, additional channels are necessary to help researchers communicate more specialized findings to a growing multi-disciplinary audience. The journal’s expansion to include an open-access publishing model allows for such added capacity.

DADM will drive scientific advances by creating linkages between the discovery and validation of novel biomarkers. Furthermore, the Journal will report on the application of biomarkers to more sensitively and reliably diagnose disease (including the preclinical disease burden), assess disease severity, and monitor progression both in the clinic and within the context of clinical trials. The expectation for submitted reports will be to translate fundamental knowledge about the biology and/or clinical features of the disease into practical reports that describe efforts to systematically validate biomarkers that will serve to advance our field.

Article topics should explore the development of biomarkers (broadly defined, and including cognitive, imaging, physiologic, and biochemical approaches), surrogate markers, and conceptual/methodologic challenges. Publication priority will be given to reports that (1) describe putative surrogate markers that accurately track disease progression and/or treatment response, (2) explore the validity and reliability of biomarkers that have the potential to fulfill international regulatory requirements, (3) use data from large, well-characterized population-based cohorts that encompass the heterogeneity, geographical, and ethnic diversity of asymptomatic individuals, and/or (4) develop advanced algorithms that consider multimarker arrays (e.g., integrated-omics, genetics, biofluids, imaging) and advanced computational analytics and technologies.

DADM will publish comprehensive literature reviews that serve to expand the state of knowledge, occasional editorials, and perspectives. In addition, the Journal will make full use of the electronic publication format—including a web portal to the Alzheimer’s & Dementia Resource Center (AlzDem.Org)—all intended to challenge editors, reviewers, authors, and readers to consider the methods and technologies as a pathway to inform deeper understanding of the disease and its natural history.

As an online-only open access journal, DADM has several advantages compared with standard print journals. In addition to a rapid review process, the journal will issue DOI identifiers to all accepted articles within 1 month of final manuscript acceptance. In addition to publishing fully composed articles within 30 days of acceptance, DADM will also be able to publish accompanying video clips (when appropriate), full color graphics for figures, and more extensive use of imaging to accompany the accepted articles.

1. Why publish in an open access journal?

There are already many venues available to publish exciting new research, and yet Alzheimer’s & Dementia is still unable to publish all the excellent reports submitted for consideration. The new open access journals of the Alzheimer’s Association are tied directly to the A&D editorial...
office, with shared representation on the editorial boards and integrated communication among all the editors with respect to identifying the best vehicle for the publication of each manuscript that meets our high level of editorial review. Also, clear advantages exist to authors for publishing in the new open access journals. A recent study conducted by the British Research Information Network (available at: www.researchinfonet.org) analyzed the web traffic to more than 700 articles published in hybrid science journal Nature Communications, during the first 6 months of 2013. Author-sponsored articles as open access papers were viewed more than twice as often as those articles that were only accessible to the journal’s paid subscribers. Moreover, an additional analysis of more than 2000 reports published in Nature Communications between April 2010 and June 2013 revealed that open access articles were cited a median of 11 times compared with a median of 7 citations for subscription-only articles [33].

2. How was the journal’s title chosen?

The title of DADM is intended to map directly on to the new classification system promoted by the National Institute of Aging, the Alzheimer’s Association, and several other international funders of Alzheimer’s disease research from North America, Europe, Asia, and Oceania [34]. This “common Alzheimer’s disease research ontology” (CADRO) is organized around seven [7] major categories of grant-supported activities. The second of these seven categories is “diagnosis, assessment, and disease monitoring.” To help promote this international classification system, this title was selected for the new journal with the belief that the CADRO classifications will become the standard by which both governmental and private philanthropic funding agencies will categorize all award information for the purpose of sharing across agencies, as acknowledged recently by the International Funders Group (Alzheimer’s Association International Conference, Boston, July 2013). As such, the editors believe that the use of this classification system for publications will be of assistance to both funding agencies and authors/investigators who will increasingly need to demonstrate how their work maps onto the CADRO ontology.

3. Publication in DADM

Similar to its parent journal, Alzheimer’s & Dementia: Diagnosis, Assessment & Disease Monitoring will focus on publishing:

- Comprehensive review articles
- Original research papers
- Short reports
- Abstracts of reports presented at select international meetings
- In-depth perspectives
- Theoretical and/or translational reports that attempt to integrate knowledge across disciplines
- Special issues on specific topics of high interest to the readership

In addition, to take full-advantage of its electronic publishing approach and web platforms, this journal will publish

- Occasional and striking images (both artistic and those resulting from laboratory work, clinical practice, and neuroimaging) that are provocative and informative—any reader may submit such images for consideration
- Special talks, videos, and slide sets
- Occasional sets of reports that actively encourage debate on controversial issues
- Reports that could be tangential to the core focus of biomarker development/validation but that are, nonetheless, of high interest to our readers.

Our hope and intent is to create a novel forum for rapid communication and to foster both dialogue and cross-fertilization of ideas between disciplines.

As noted, DADM will consider novel works, meta-analyses, and systematic reviews covering a wide range of topics, including, but not limited to

- Neuroimaging, systems physiology, and functional neuroanatomy
- Genomics and epigenetics
- Neurochemistry and peripheral biochemical markers
- Cognitive neuroscience, clinical neuropsychology, and behavioral neurology

4. The editorial team

The editor-in-chief of Alzheimer’s & Dementia: Diagnosis, Assessment & Disease Monitoring, is Dr. Peter J. Snyder. Drs. Ara Khachaturian and Kathleen Hayden will be serving as the executive editors of DADM. In addition, the senior editorial team includes five highly accomplished leaders in our field who will serve as Senior Associate Editors: Drs. Liana Apostolova (Geffen School of Medicine, University of California, Los Angeles), Stefan Teipel (University of Rostock, Rostock, Germany), Henrik Zetterberg (University of Gothenburg, Gothenburg, Sweden), Paul Maruff (CogState, Ltd., and University of Melbourne, Melbourne, Australia), and Richard Jones (Alpert Medical School of Brown University, Providence, RI). These Senior Associate Editors provide both depth and breadth of knowledge in the field and allow for a balanced and experienced senior leadership team. We are also joined by two skilled Statistical Editors, Drs. Jason T. Machan (Rhode Island Hospital and Alpert Medical School of Brown University, Providence, RI) and Stephen W. Hurt (New York–Presbyterian Hospital and Weill Cornell Medical College, New York, NY).
The launch of this Journal has been made possible by the guidance, support, and continual advice of Dr. Zaven Khachaturian (Editor-in-Chief, Alzheimer’s & Dementia), Dr. Ara Khachaturian (Executive Editor, Alzheimer’s & Dementia and the Alzheimer’s & Dementia open access journal portfolio), Dr. Lon Schneider (Editor-in-Chief, Alzheimer’s & Dementia: Translational Research & Clinical Interventions), Dr. Kathleen Hayden (Senior Associate Editor, Alzheimer’s & Dementia and Executive Editor, Alzheimer’s & Dementia open access journal portfolio), Mr. Terry Materese (Executive Publisher, Elsevier), and Dr. Maria Carrillo (Vice President of Medical and Scientific Relations, Alzheimer’s Association).

Finally, the DADM editorial board is composed of more than 30 experienced, talented, and respected scientists and clinicians, all of whom have agreed to serve as active members of our editorial board (available at: http://ees.elsevier.com/dadm/default.asp). These individuals were selected because they are international opinion leaders who will provide comprehensive coverage of all relevant disciplines and because they are enthusiastic about contributing to the growth of the Alzheimer’s & Dementia family of journals.

The editors of Alzheimer’s & Dementia: Diagnosis, Assessment & Disease Monitoring hope that readers will enjoy and benefit from these first open access articles and that readers will consider becoming published authors in this new journal.

Peter J. Snyder
Editor-in-Chief
Department of Neurology
Alpert Medical School of Brown University and Lifespan Hospital System
Providence, RI, USA

*Corresponding author. Tel.: +1-401-444-4117.
E-mail address: Editor_DADM@lifespan.org

References

[1] Weiner MW, Veitch DP, Aisen PS, Beckett LA, Cairns NJ, Green RC, et al. The Alzheimer’s Disease Neuroimaging Initiative: A review of papers published since its inception. Alzheimers Dement 2013; 9:e111–94.

[2] Weiner MW, Veitch DP, Aisen PS, Beckett LA, Cairns NJ, Green RC, et al. The Alzheimer’s Disease Neuroimaging Initiative: A review of papers published since its inception. Alzheimers Dement 2012; 8(1 Suppl):S1–68.

[3] Roses AD, Lutz MW, Saunders AM, Goldgaber D, Saul R, Sundseth SS, et al. African-American TOMM40*523-APOE haplotypes are admixture of West African and Caucasian alleles. Alzheimers Dement 2014; 10:592–601.

[4] Logue MW, Schu M, Vardaran AN, Farrell J, Bennett DA, Buxbaum JD, et al. Two rare AKAP9 variants are associated with Alzheimer’s disease in African Americans. Alzheimers Dement 2014; 10:609–18.

[5] Slattery CF, Beck JA, Harper L, Adamson G, Abdi Z, Uphill J, et al. R47H TREM2 variant increases risk of typical early-onset Alzheimer’s disease but not of prion or frontotemporal dementia. Alzheimers Dement 2014; 10:602–8.

[6] Brickman AM, Schupf N, Manly JJ, Stern Y, Luchsinger JA, Provenzano FA, et al. APOE epsilon4 and risk for Alzheimer’s disease: Do regionally distributed white matter hyperintensities play a role? Alzheimers Dement 2014; 10:619–29.

[7] Josephs KA, Duffy JR, Strand EA, Machulda MM, Senjem ML, Lowe VJ, et al. APOE epsilon4 influences beta-amyloid deposition in primary progressive aphasia and speech apraxia. Alzheimers Dement 2014; 10:630–6.

[8] Hohman TJ, Koran ME, Thornton-Wells TA, Alzheimer’s Disease Neuroimaging Initiative. Genetic modification of the relationship between phosphorylated tau and neurodegeneration. Alzheimers Dement 2014; 10:637–45.

[9] Samieri C, Proust-Lima C, Glynour MM, Okereke OI, Amariglio RE, Sperling RA, et al. Subjective cognitive concerns, episodic memory, and the APOE epsilon4 allele. Alzheimers Dement 2014; 10:752–9.

[10] Michaelson DM. APOE4: The most prevalent yet understudied risk factor for Alzheimer’s disease. Alzheimers Dement 2014; 10:861–8.

[11] Rupp C, Beyreuther K, Maurer K, Kins S. A presenilin 1 mutation in the first case of Alzheimer’s disease: Revisited. Alzheimers Dement 2014; 10:869–72.

[12] Barnes DE, Cenzer IS, Yaffe K, Ritchie CS, Lee SJ, Alzheimer’s Disease Neuroimaging Initiative. A point-based tool to predict conversion from mild cognitive impairment to probable Alzheimer’s disease. Alzheimers Dement 2014; 10:646–55.

[13] Barnes DE, Beiser AS, Lee A, Langa KM, Koyama A, Preis SR, et al. Development and validation of a brief dementia screening indicator for primary care. Alzheimers Dement 2014; 10:656–65.

[14] Langbaum JB, Hendrix SB, Ayutyanont N, Chen K, Fleisher AS, Shah RC, et al. An empirically derived composite cognitive test score with improved power to track and evaluate treatments for preclinical Alzheimer’s disease. Alzheimers Dement 2014; 10:666–76.

[15] Beeri MS, Ravona-Springer R, Mosher E, Schmeidler J, Godbold J, Karpati T, et al. The Israel Diabetes and Cognitive Decline (IDCD) study: Design and baseline characteristics. Alzheimers Dement 2014; 10:769–78.

[16] Snyder PJ, Wrobleski KK, Brannan S, Miller DS, Schindler RJ, DeSantis S, et al. Assessing cognition and function in Alzheimer’s disease clinical trials: Do we have the right tools? Alzheimers Dement 2014; 10:853–60.

[17] Sattlecker M, Kiddle SJ, Newhouse S, Proitsi P, Nelson S, Williams S, et al. Alzheimer’s disease biomarker discovery using SOMAscan multiplexed protein technology. Alzheimers Dement 2014; 10:724–34.

[18] Bilgel M, An Y, Lang A, Prince J, Ferrucci L, Jedynak B, et al. Trajectories of Alzheimer disease-related cognitive measures in a longitudinal sample. Alzheimers Dement 2014; 10:735–42.

[19] Lim YY, Maruff P, Pietrzak RH, Ellis KA, Darby D, Ames D, et al. Aβ and cognitive change: Examining the preclinical and prodromal stages of Alzheimer’s disease. Alzheimers Dement 2014; 10:743–51.

[20] Taranas I, Tsolaki M, Nef T, M Müri R, Mosimann UP. Can a novel computerized cognitive screening test provide additional information for early detection of Alzheimer’s disease? Alzheimers Dement 2014; 10:790–8.

[21] Hye A, Riddoch-Contreras J, Baird AL, Ashton NJ, Bazenet C, Leung R, et al. Plasma proteins predict conversion to dementia from prodromal disease. Alzheimers Dement 2014; 10:799–807.

[22] Cosentino S, Zahodne LB, Brandt J, Blacker D, Albert M, Dubois B, et al. Social cognition in Alzheimer’s disease: A separate construct contributing to dependence. Alzheimers Dement 2014; 10:818–26.

[23] Cerami C, Dodich A, Canessa N, Crespi C, Marcone A, Cortese F, et al. Neural correlates of empathic impairment in the behavioral variant of frontotemporal dementia. Alzheimers Dement 2014; 10:827–34.

[24] Stephens CE, Newcomer R, Blegen M, Miller B, Harrington C. The effects of cognitive impairment on nursing home residents’ emergency department visits and hospitalizations. Alzheimers Dement 2014; 10:835–43.

[25] Mathews M, Abner E, Kryscio R, Jicha G, Cooper G, Smith C, et al. Diagnostic accuracy and practice effects in the National Alzheimer’s
[26] Alexopoulos P, Kriett L, Haller B, Klupp E, Gray K, Grimmer T, et al. Limited agreement between biomarkers of neuronal injury at different stages of Alzheimer’s disease. Alzheimers Dement 2014;10:675–83.

[27] Dodge HH, Zhu J, Harvey D, Saito N, Silbert LC, Kaye JA, et al. Biomarker progressions explain higher variability in stage-specific cognitive decline than baseline values in Alzheimer disease. Alzheimers Dement 2014;10:684–9.

[28] Gomar JJ, Conejero-Goldberg C, Davies P, Goldberg TE, Alzheimer’s Disease Neuroimaging Initiative. Extension and refinement of the predictive value of different classes of markers in ADNI: Four-year follow-up data. Alzheimers Dement 2014;10:704–12.

[29] Duits FH, Teunissen CE, Bouwman FH, Visser PJ, Mattsson N, Zetterberg H, et al. The cerebrospinal fluid “Alzheimer profile”: Easily said, but what does it mean. Alzheimers Dement 2014;10:713–23.

[30] Hayden KM, Makeeva OA, Newby LK, Plassman BL, Markova VV, Dunham A, et al. A comparison of neuropsychological performance between US and Russia: Preparing for a global clinical trial. Alzheimers Dement 2014;10:760–8.

[31] Molinuevo JL, Blennow K, Dubois B, Engelborghs S, Lewczuk P, Perret-Liaudet A, et al. The clinical use of cerebrospinal fluid biomarker testing for Alzheimer’s disease diagnosis: A consensus paper from the Alzheimer’s Biomarkers Standardization Initiative. Alzheimers Dement 2014;10:808–17.

[32] Jessen F, Amariglio RE, van Boxtel M, Breteler M, Ceccaldi M, Chetelat G, et al. A conceptual framework for research on subjective cognitive decline in preclinical Alzheimer’s disease. Alzheimers Dement 2014;10:844–52.

[33] Jump P. (30 July, 2014). Open access papers ‘gain more traffic and citations’. The Higher Education. Available at: http://www.timeshighereducation.co.uk/home/open-access-papers-gain-more-traffic-and-citations/2014850.article?utm_source=WhatVDigital&utm_medium=--Tecnologia&utm_campaign=noticiasutm_source=WhatVDigital&utm_medium=--Tecnologia&utm_campaign=noticias. Accessed August 11, 2014.

[34] Refolo LM, Snyder H, Liggins C, Ryan L, Silverberg N, Petanceska S, et al. Common Alzheimer’s Disease Research Ontology: National Institute on Aging and Alzheimer’s Association collaborative project. Alzheimers Dement 2012;8:372–5.