

Bibliometric analysis of hidradenitis suppurativa trends from Asia and Australasia

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Conflict of Interest Disclosure

VYS is on the board of directors for the Hidradenitis Suppurativa Foundation (HSF), a stock shareholder of Learn Health, and has served as an advisor, investigator and/or speaker for Sanofi Genzyme, Regeneron, AbbVie, Burt's Bees, Dermira, Eli Lilly, Novartis, Pfizer, Galderma, Leo Pharma, SUN Pharma, Menlo Therapeutics, TARGET-DERM, Kiniksa, GpSkin, and Skin Actives Scientific. JLH is on the board of directors for the Hidradenitis Suppurativa Foundation (HSF), has served as an advisor for Novartis and speaker for AbbVie.

Background and Objective

- Over the past decade, hidradenitis suppurativa (HS) has gained increased interest with improved knowledge of pathogenesis and therapies
- There are known phenotypic and epidemiological differences in HS regionally and globally however the most highly cited works are produced from North America and Europe¹⁻⁴
- Skin of color participants are under-represented in HS clinical trials^{5,6}
- There is a paucity of bibliometric data on publications from Asia and Australasia
- **Objective:** To characterize HS publication trends in Asia and Australasia over the past decade

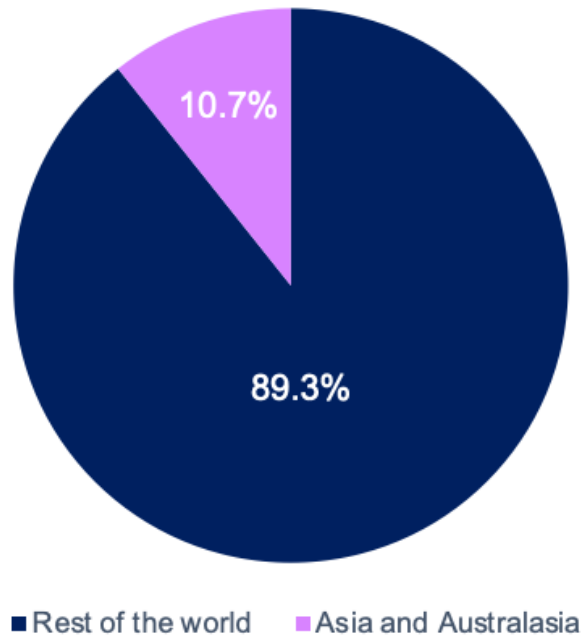
Methods

- In August 2020, Pubmed was searched to identify HS-related articles using the following terms: 'hidradenitis suppurativa' OR 'suppurative hidradenitis' OR 'hidradenitis' OR 'hidradenitides' OR 'acne inversa' OR 'velpeau disease' OR 'verneuil disease.'
- Articles were analyzed for senior authorship, country of origin, article topic, and study design.
- Abstracts, proceedings reports, errata, and introduction commentaries to supplemental materials were excluded.

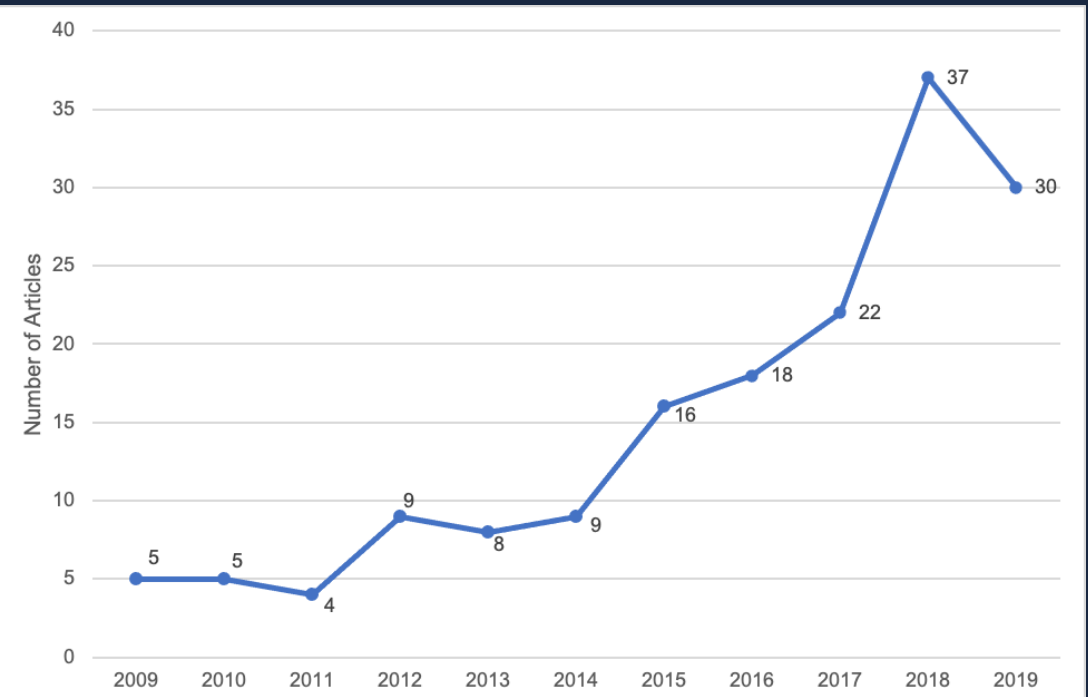
Results

- Out of 1523 articles, 163 (10.7) were from Asia and Australasia
- A sharp increase in publications was observed in 2015 with 75% of articles published in the last half of the decade

Global HS literature 2009-2019



Yearly publications from Asia and Australasia

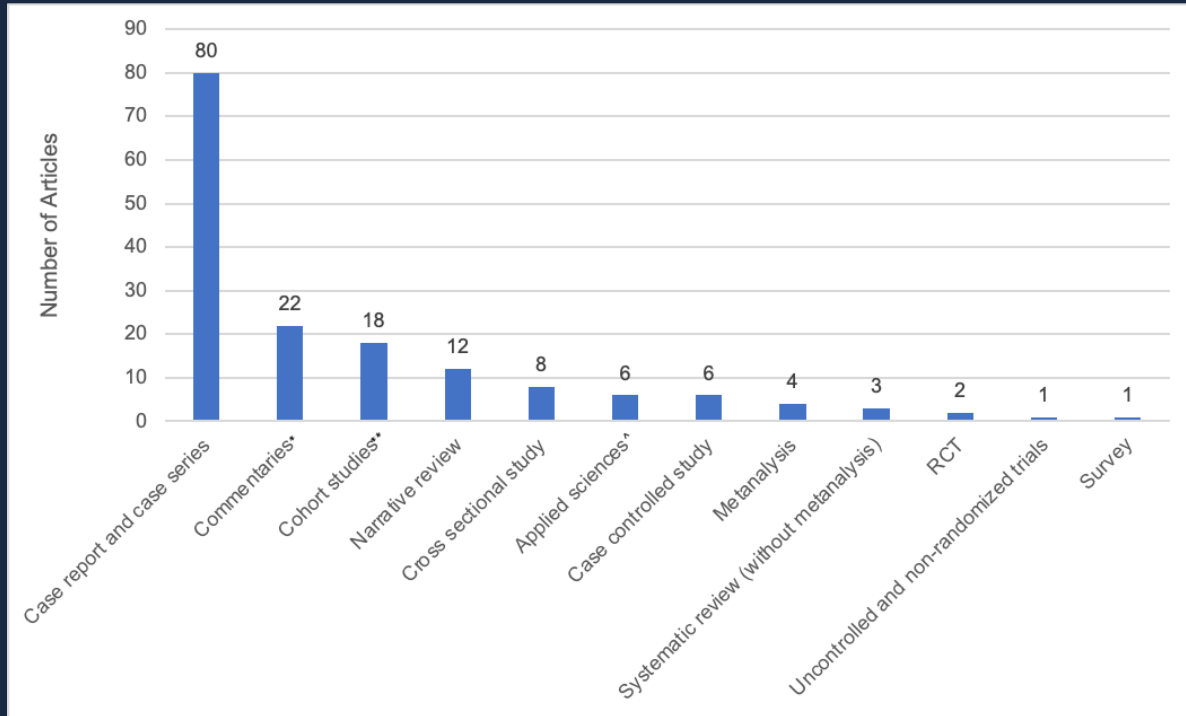


Results

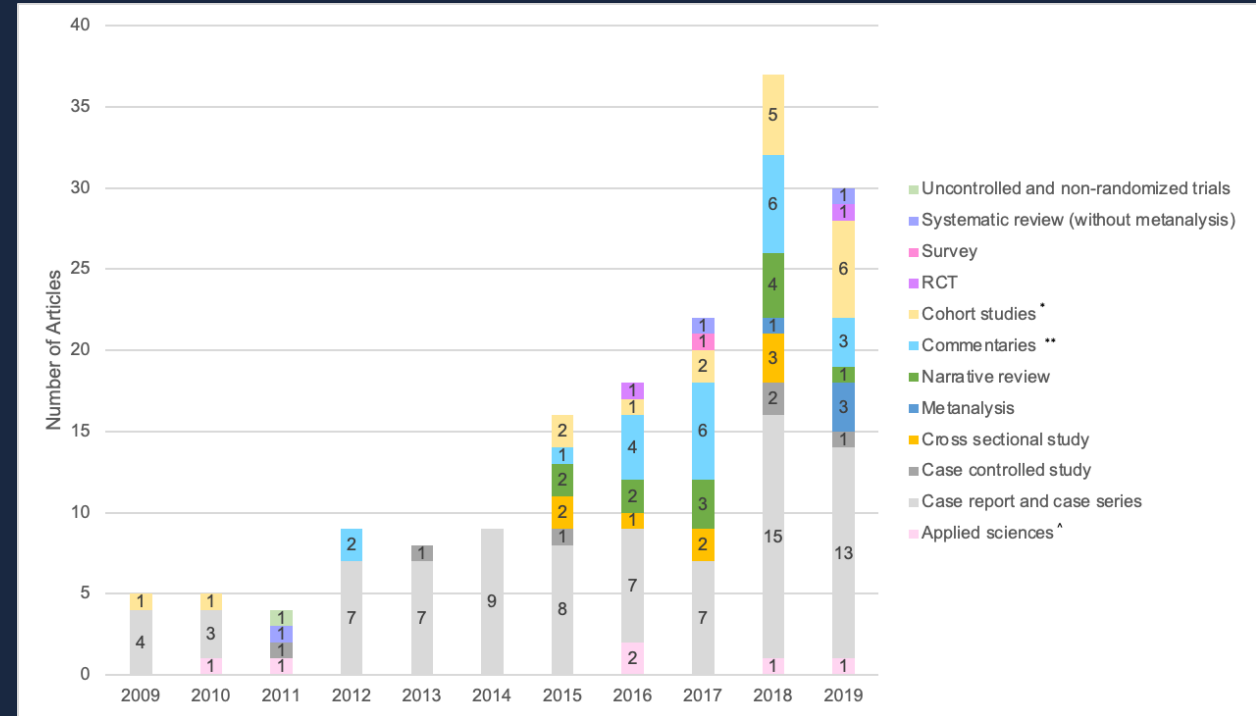
- The most consistently published study type yearly and overall were case reports/series (49%, 80/163).
- Cohort studies, cross sectional studies, and metaanalyses were the most published high level of evidence (LOE) articles (18%, 30/163).

- There was an increase in high LOE publications from 8% (3/40) to 26% (32/123) in the last half of the decade.
- Efforts were made to increase Asian representation in RCTs as both studies from Japan and Turkey included entirely Asian patients.

Types of Articles Published in Asia and Australasia from 2009-2019



Types of Articles Published by Decade in Asia and Australasia 2009-2019

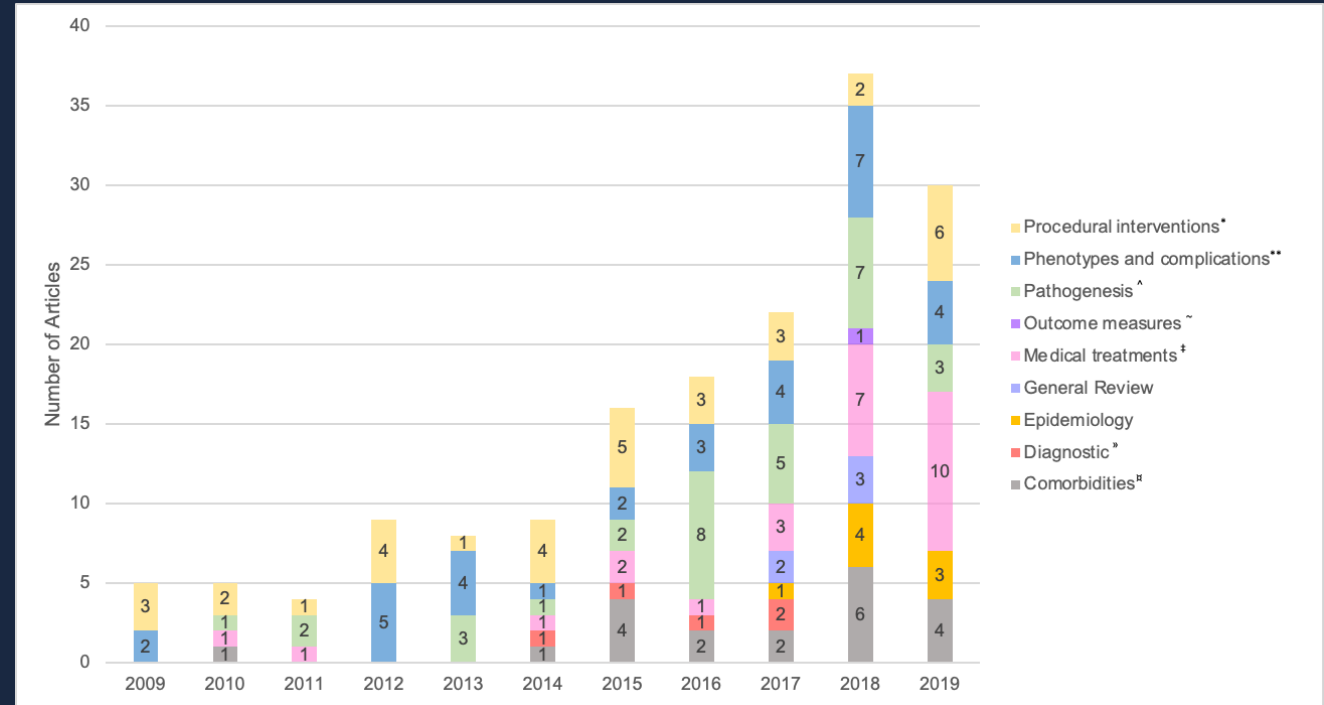


RCT, randomized controlled trial
 * Prospective and retrospective cohort studies
 † Basic science, in vitro, animal studies, non-human studies
 ‡ Opinions, perspectives, commentaries, editorials, letters to the editor

Results

- Increased focus of pathogenesis, medical treatments, comorbidities, and epidemiology in latter half of decade
- Surgical techniques were the most studied procedural intervention (74%, 25/34)
- Genetic mutations were the most investigated topic in pathogenesis (84%, 27/32)
- Biologics were the most investigated therapy (65%, 17/26)
- The association between metabolic syndrome and HS was the most studied comorbidity (25%, 5/20).

Topic of Articles Published by Decade in Asia and Australasia from 2009-2019



* Injections, surgery, light, lasers, radiation, cryotherapy

† Including differential diagnosis

‡ Genetics/epigenetics, biomarkers, cytokines, microbiome, etc.

§ Topical and systemic

|| Medical and psychiatric

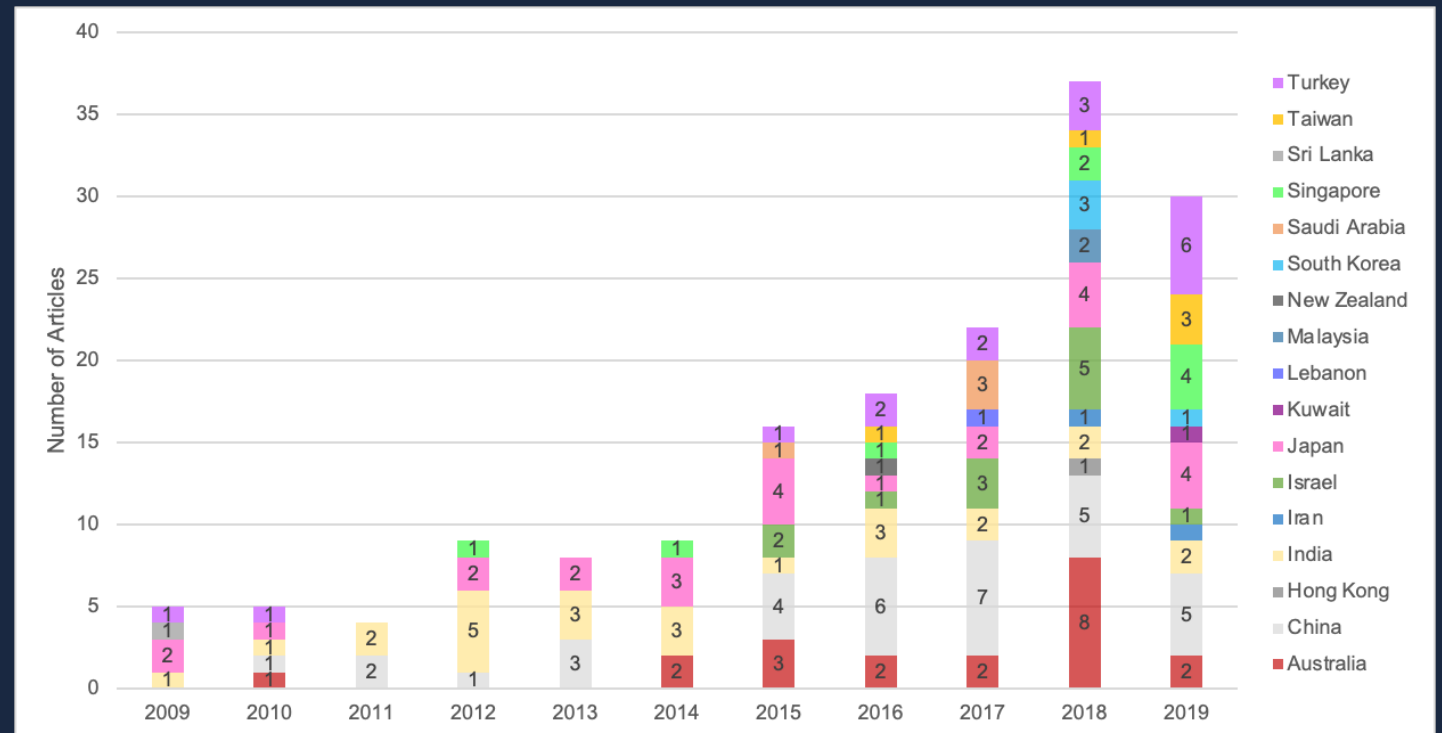
** Histopathology, imaging, etc.

†† Physical outcomes and patient reported outcomes

Results

- The leading publishing countries were China (n=34), Japan (n=25), and India (n=25)
- Australia, Israel, and Turkey increased contributions in the latter half of the decade (13%, 5/40) vs (34%, 42/123)

Country of Senior Author of Publications in Asia and Australasia by Decade



Conclusion

- Increases in publication numbers and diversity in Asia and Australasia are encouraging, however, our results highlight the paucity of publications compared to North America and Europe.
- The most published study design in Asia and Australasia was case report/series, emphasizing the need for higher LOE publications
- With known regional, phenotypic, and epidemiologic differences in HS, SOC individuals are underrepresented in RCTs of emerging immunomodulators, despite increasing efforts^{5, 6}
- Ultimately to garner a better understanding of HS and treatment options, more geographical diversity is needed.

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