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Dermatology clinical trials: Analysis of investments by the top 10 pharmaceutical companies

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Introduction: Pharmaceutical drug development is essential for dermatological therapy. However, the high cost of drug development and the limited number of effective drugs for rare dermatological conditions have led to a lack of diversity among drugs developed and a limited range of diseases targeted which is partly attributable to economic considerations. Herein, we analyzed patterns and characteristics of dermatological clinical trials undertaken by the top 10 pharmaceutical companies globally. Methods: Clinicaltrials.gov was searched for dermatologic trials between January 2010 and June 2021. Data was collected on condition, drug characteristics, length of study, and phase. Economic data obtained from Yahoo Finance was analyzed. The t-test and Chi-squared test were used to determine statistical significance. Results: Of the 344 unique trials, 82% were in phase 2 or 3 (141 phase 2, 140 phase 3). Merck had the most ongoing trials (45 active, 7 completed), followed by Novartis (the most overall trials with the most completed (19 active, 46 completed), and Johnson & Johnson had the fewest ongoing trials (no active trials, 5 completed). 86% of trials (297/344) were on systemic medications, 14% (47/344) were on topicals. Eighty-five percent (295/344) of trials revolved around only ten conditions, with melanoma being the most studied disease (22%, n = 75) followed by psoriasis (22%, n = 74) and atopic dermatitis (18%, n = 61). The majority of trials (81%) included adults only participants. Over the past decade, the companies had a mean growth in valuation of 115.8 billion U.S. dollars (SD ± 97.8 billion). Conclusions: The 10 largest pharmaceutical companies prefer to invest in systemic dermatologic medications and adult populations, focusing on a select few conditions. Commercial Disclosure: None identified.

Dermatology eConsults for triaging suspected skin cancers: A retrospective cost analysis

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During the coronavirus pandemic, asynchronous teledermatology and tele-triage plots became increasingly essential, but reimbursement is not widespread. Our study of an asynchronous teledermatology eConsult program for 'suspicious lesions' aims to calculate potential cost-savings of the program with recent telemedicine reimbursement rates published by the Centers for Medicare & Medicaid Services (CMS), as compared with a traditional ambulatory model, using observed and projected frequencies of skin biopsies at our institution. We conducted a 3-year retrospective cohort study of patient characteristics, clinical outcomes, and payer costs associated with 'suspicious lesion' eConsults. For 548 cases receiving an eConsult for a single suspicious lesion within our study period, the eConsult program cost $32,298.40 ($928.11/case). Compared with a traditional standalone ambulatory model, tele-triage could potentially save $8252.59 ($325.71/case) based on the 41.8% observed biopsy rate in eConsult patients subsequently presenting to ambulatory clinic. We calculated a minimum savings of $2,348,860 ($86.75/case) using a 23.6% theoretical biopsy rate based on suspicious lesion eConsults that were followed by in-person evaluation but who nonetheless presented in ambulatory clinic for assessment of the lesion. Threshold analysis using the actual cost of the eConsult program revealed that institutions with biopsy rates greater than 16.4% for new patients presenting with 'suspicious lesions' could yield cost savings from tele-triage compared with a standalone ambulatory model. Overall, health systems may consider exploring tele-triage of new patients with suspicious lesions given its potential for cost savings. Limitations of this study include its single-center retrospective design as well as utilization of reimbursement codes from one payer type. Commercial Disclosure: None identified.

Dermatology education for medical students in the era of COVID-19

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Online dermatology education has been around for years, but the COVID-19 pandemic has significantly increased dependence on it. With the recommendations for social distancing, medical school curriculum has adjusted to keep education virtual and distanced, yet effective. Herein, we discuss the various modifications that have been made to medical student education to continue delivering dermatology education along with patient exposure and faculty interaction. To quantify the availability and method of virtual education adaptations for medical students, we reviewed 140 ACGME accredited dermatology residency program websites. Websites were queried in September and October of 2020 and the presence or absence of referenced virtual education opportunities was coded. If referenced, the type of opportunity was recorded. After reviewing the opportunities, it was evident that both in-person, passive experiences such as virtual didactics and grand rounds were offered along with interactive experiences involving patient exposure. Passive experiences were the most offered, while interactive patient encounters were only offered by a select number of programs. This pattern may be due to the ease of virtual lectures via videoconferencing platforms, compared with the logistics of organizing virtual patient encounters. Virtual educational opportunities are rapidly developing to improve knowledge in the field of dermatology. While these resources are not new in the medical field, the pandemic has accelerated the need to increase implementation of them. To serve a meaningful educational experience despite the societal restrictions, we suggest a virtual dermatology experience that incorporates interactive online didactics as well as interactions with both faculty and patients. Commercial Disclosure: None identified.

Dermatology journal advisory boards and editorial independence

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Background: Dermatology journals play an essential role in the distribution and promotion of scientific and medical information. Despite this, there are little data on organizational structure with respect to its editors, owners, and journal boards that oversee the day-to-day operations for these entities. Objective: This study aimed to explore the current organizational and advisory structures of dermatology journals and best practice recommendations. Methods: The editors-in-chief of the major PubMed indexed dermatology journals were selected through e-mail invitation to participate in this study. The online survey included 29 questions examining general statistics of each journal, open access organizational structure with respect to its editors, owners, and journal boards that oversee the day-to-day operations for these entities. Objective: This study aimed to explore the current organizational and advisory structures of dermatology journals and best practice recommendations. Results: The majority of the 52 journals in this study publish at least four issues per year (96.1%). In addition, 40.4% (21/52) of the journals have an open access model, and 44.4% (4/9) of those are designated Gold. Twenty-nine of 52 journals (55.8%) are society-owned, with 19 (65.5%) primarily governed by a society board while 18 (54.6%) have an advisory committee or alternative body. Most editor(s-in-chief (56.9%) serve between 3-to-5 year terms while 84.6% had the option of 1 renewal. Conclusions: The oversight structure of dermatology journals vary and many do not follow current best practice recommendations from the World Association of Medical Editors, the International Committee of Medical Journal Editors, and the Council of Science Editors. Transparency regarding leadership, governance, and due process are needed to maintain editorial independence and integrity. Commercial Disclosure: None identified.