17638

Most-used outcome measurements in clinical trials from 2018 to 2019 for plaque psoriasis

Payvand Kamrani, BS, Department of Dermatology, Wake Forest School of Medicine; Arjun Bashyam, Steven Feldman, MD, PhD, Wake Forest School of Medicine

Background: Measures of psoriasis severity are needed for assessing disease in both clinical trials and clinical practice. The available tools have advantages and disadvantages making them more or less useful for various uses.

Objective: To provide dermatologists with scoring criteria, advantages and disadvantages on most utilized outcome measures used in clinical trials as well as published guidelines of these measurements.

Methods: The NIH clinical trials registry was reviewed for the following inclusion criteria: phase III, phase IV, plaque psoriasis, dates July 15, 2018, to July 15, 2019. 38 clinical trials met criteria. Measurements that were present in three clinical trials or less were excluded.

Results: Six outcome measurements were most frequently utilized. The most common measure of objective disease severity was Physician's Global Assessment (PGA). The most common patient-reported impact measurement was the Dermatology Life Quality Index (DLQI). PGA allows for a simple, quick evaluation of global disease but does not discriminate for small changes. DLQI accounts for several aspects of life however can underestimate qualify of life burden. Due to the complicated nature of other measurements, the National Psoriasis Foundation endorses, BSA as an instrument of use.

Limitations: Many of the measures were developed for assessing plaque psoriasis and may not be appropriate for guttate, inverse and pustular psoriasis.

Conclusions: Further standardization of outcome measures can allow for an accurate comparison of different treatment modalities. Although the PASI provides a nearly continuous measurement of severity, the PGA score has the advantage of clearer meaning to physicians and patients.

Commercial disclosure: None identified.

17641

Gender differences in burnout among dermatologists and dermatology trainees

Tyler D. Coolman, Kirksville College of Osteopathic Medicine, A.T. Still University; Olivia Ware, BA, Howard University College of Medicine; Michi M. Shinohara, University of Washington

Background and Objective: Dermatology has the fastest growing rate of burnout in medicine. Female physicians are particularly vulnerable to burnout. Burnout in women is more often triggered by emotional exhaustion, while depersonalization affects men. We hypothesized that female dermatologists experience similar patterns of burnout.

Design: An anonymous online survey was distributed using a combination of professional listservs and social media platforms. The survey included the Maslach Burnout Inventory Human Services Survey for Medical Professionals (MBI-HSS MP) which subcategorizes burnout into emotional exhaustion (EE), depersonalization (DP), and personal accomplishment (PA).

Results: Of 144 respondents, 53% were female (77/134). More were board-certified dermatologists (75%; 108/144) than trainees (25%; 36/144). There was no significant difference in the hours spent at work or at home between women and men. Forty-six percent of respondents reported at least one symptom of burnout. There was no significant difference in burnout between men and women ($P = .67$). Female dermatologists had significantly higher levels of EE than men ($P = .01$), but not DP ($P = .10$). More than half of the women surveyed practice positive reframing and active coping strategies to deal with job stress. Being married, having children, and having a self-reported psychiatric illness were not associated with burnout ($P > .05$ for each).

Conclusions: Our findings suggest that burnout among dermatologists/dermatology trainees may impact men and women differently, with higher levels of EE in women despite their use of positive reframing and active coping strategies.

Commercial disclosure: None identified.

17646

Hydroa vacciniforme-like lymphoproliferative disorder initially presenting as severe insect allergy in a 46-year-old woman

Tiffany Yu-Tin Chen, MD, Brigham and Women's Hospital

Background: Hydroa vacciniforme–like lymphoproliferative disorder (HV-LPD) is a chronic EBV-associated lymphoproliferative disorder most commonly seen in Asian and South American children. Initially thought to be a benign photodermatosis, HV-LPD is a disorder of monoclonal or rarely polyclonal T cells or NK cells.

Case: A 46-year-old woman from China with a long-standing history of severe allergic reactions to insect bites presented with acne-like rashes on her face with minimal improvement with light therapy and antibiotics. Initially thought to be mosquito bites, her lesions progressed to papulonecrotic papules with ulceration. EBER positivity on skin biopsy and high viral load on EBV PCR were consistent with an NK/T-cell lymphoma. Despite undergoing DEP chemotherapy, her lesions persisted. Repeat biopsy showed a superficial and deep dermal perivascular and periadnexal atypical lymphohistiocytic infiltrate of intermediate-sized monocytoid cells and admixed small-to-intermediate-size lymphocytes that displayed clonal T-cell gene rearrangement. Thrombotic vasculitis with secondary superficial ischemic changes, including frank infarction and surface ulceration was also present. Ultimately, the morphologic and immunophenotypic findings were consistent with chronic active EBV infection; in conjunction with clinical presentation, prolonged course, T-cell gene rearrangement, and current features, were consistent with HV-LPD. She began treatment with methotrexate, which initially showed improvement of lesions, but the lesions progressed despite increasing doses. Ultimately she was switched to IFN-α, which has been effective in stabilizing her lesions.

Discussion: HV-LPD can initially present as severe insect bite allergies. Often chemorefractory, HV-LPD may respond to immune modulators in adult cases. However, no standard treatment has been established.

Commercial disclosure: None identified.

17648

Impact of corticosteroids on graft maintenance in renal transplant patients on anti–PD-1 immunotherapy

Melissa Danesh, MD, Brigham and Women's Hospital, Harvard Medical School; Patrick M. Mulvaney, Department of Dermatology, Brigham and Women's Hospital, Harvard Medical School, Boston, Massachusetts

Background: Checkpoint inhibitors have important roles in patients at high risk of developing malignancy, such as solid organ transplant patients. However, the activation of T cells via blockage of immune-regulatory checkpoint molecules may increase the risk of graft rejection.

Methods: Patients were identified from electronic health records at Brigham and Women's Hospital and Massachusetts General Hospital. Cases were included if 1) the patient had a history of solid organ transplant, 2) the patient had received immunotherapy for cancer treatment after solid organ transplant, and 3) the transplant was functioning at the time immunotherapy treatment was initiated.

Results: The initial search yielded 414 patients, of which five met the aforementioned criteria, all of whom had received renal transplants. The type of malignancies in these patients included cutaneous squamous cell carcinoma (n = 3), melanoma (n = 1), and gastric cancer (n = 1). All had stage IV malignancy at the time of treatment and underwent treatment with pembrolizumab. Two patients had changes to their immunosuppressive agents at the time of immunotherapy initiation (both added daily prednisone, one also changed from tacrolimus to everolimus), neither of whom experienced graft rejection. The other three patients developed organ transplant rejection after immunotherapy. Of patients who had episodes of rejection, two had stabilization of graft function after addition of primarily corticosteroid-based immunosuppressive regimens. One died after loss of his graft but had chosen comfort measures only so did not receive treatment for rejection.

Conclusions: High dose and peri-infusional corticosteroid doses may provide graft protection in the setting of rejection following anti–PD-1 inhibitors.

Commercial disclosure: None identified.