Foundational Elements for Collaboration in Ophthalmic Oncology
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Sharing a common scientific language (staging system) allows us to communicate our ideas and enable progress.1–3 The American Joint Committee on Cancer (AJCC), the Union for International Cancer Control (UICC), the American Brachytherapy Society, and The Eye Cancer Foundation have worked to sponsor and support the Ophthalmic Oncology Task Force (OOTF) efforts toward collaboration in our field.4,7

The first OOTF “foundational project” was to design the most clinically useful TNM-based (tumor–node–metastasis) classification for eye cancers.7 The seventh and now eighth editions of the AJCC staging system included 10 subcommittees composed of >50 eye cancer specialists (ophthalmic pathologists, oculoplastic surgeons, ophthalmic oncologists, medical oncologists, pediatric oncologists) and their subspecialty colleagues from around the world. Just published in October of 2016, the eighth edition will be adopted by the UICC and hundreds of oncology groups around the world. It represents the most collaborative, current, and consensus-driven guidelines our subspecialty has to offer.4,5

During the 6 years since the previous edition, each subcommittee undertook a new, detailed review of the literature. Then, multiple teleconferences and face-to-face discussions were led to achieve consensus regarding methods of ocular tumor diagnosis and treatment. With this foundation, tumor-specific committees (uveal melanoma, retinoblastoma, ocular adnexal lymphoma, orbital sarcoma, orbital carcinoma, eyelid carcinoma, conjunctival melanoma, conjunctival carcinoma) decided how eye cancer patients should be TNM staged. In addition, there were 2 supplemental committees to review ophthalmic pathology, genetic, molecular biology, and biomarker aspects. Held to strict editorial standards, each committee made every effort to include the latest, statistically significant medical evidence into eye cancer staging.9–18

To supplement this process, members of the OOTF had formed independent, multicenter international tumor registries. The bioinformatics group (eg, EyeCaBIG) data registries provided essential, statistically significant medical evidence for the uveal melanoma, retinoblastoma, and ocular adnexal lymphoma and other committees.19,20 For example, data from 18 909 cases of uveal melanoma now support its TNM classification of uveal melanoma and >2000 eyes provided a new evidence-based retinoblastoma staging system.6,21–23 From registries and multicenter studies, >1000 cases of ocular adnexal lymphoma helped to better define site-specific risk and uncovered evidence that radiation treatment was associated with less systemic recurrence.19,24–26

Tough decisions were made concerning the maturity of rapidly accumulating new evidence. Examples include genetic prognostication of uveal melanoma (eg, gene expression profiling, BAP1, and others) as well as the subdividing stages of in situ conjunctival melanoma.27,28 These controversies stress the need for more data collection and a continuously evolving AJCC-UICC staging system.

However, the addition of a new biomarker, “H,” to form TNMH for retinoblastoma is most exciting.29–31 For the first time, the AJCC has allowed heredity to be part of cancer staging. This pioneering decision was based on clear medical evidence we presented to the AJCC Editorial Board. Just as Knudson’s hypothesis had done, ophthalmology is leading the way into a new world of cancer staging.12

Clearly, a tremendous, world-wide effort was made to ensure that the eighth edition of the AJCC Cancer Staging Manual is the most clinically useful TNM-based staging system for ophthalmic oncology. Use of this system provides a “snapshot” of the patients’ condition before, during, and after treatment. It improves our ability to communicate with our local oncology team. It allows us to compare our patient care, research and results. By speaking a scientific language understood by our nonophthalmic colleagues around the world, AJCC-UICC staging allows ophthalmology access to the mainstream of cancer care. We urge you to adopt the eighth edition of the AJCC-UICC classification system in your clinic, for research and in all eye cancer publications.

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References

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