

# Sonidegib with and Without Adjunctive Treatment for Locally Advanced Basal Cell Carcinomas

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The Hedgehog inhibitors (HHIs) sonidegib and vismodegib are new small molecules approved for the treatment of advanced basal cell carcinomas (BCCs) in patients who present recurrence to other treatments or who are not candidates for surgery or radiotherapy. Although, in literature, several clinical trials and single-center experiences have already demonstrated their efficacy and tolerability, cases of advanced BCCs undergoing HHI treatment and not reporting complete remission of the treated lesions have been described.<sup>1,2</sup> We read with great interest the retrospective analysis written by Weissman et al<sup>3</sup> regarding the use of HHI as induction therapy with the addition of concurrent superficial radiotherapy for the treatment of locally advanced (la) BCCs, and we also want to report the results of our experience regarding the use of sonidegib as neoadjuvant treatment.

A single-center retrospective clinical study was conducted; all patients provided written informed consent. Patients aged >18 years, with one target lesion (TL) that was laBCC, receiving sonidegib for at least 24 weeks, were included in the study; patients with metastatic BCC, pregnant, or breastfeeding were excluded. Baseline data included sex, age, localization, sonidegib treatment duration, adjuvant therapies, follow-up period, and adverse events related to HHI treatment. Adjuvant treatment included non-topical treatment administered after sonidegib therapy. Therapeutic response was divided into complete remission (CR) when laBCC was documented to be histologically absent after treatments, and partial remission (PR) if the laBCC was responsive to treatment but not completely regressed after treatments. Thirty-seven patients (29 males and 8 females) with a median age of 77.2 (range 52–98) years were treated with sonidegib at the approved dosage of 200 mg/daily for a medium duration of 7.8 months (range 6–11 months). TLs were located on the head and neck ( $n = 18$ ; 49%), trunk ( $n = 8$ ; 22%), extremities ( $n = 6$ ; 16%), or orbit/periorbital area ( $n = 4$ ; 13%); 29 (78%) lesions were treated with sonidegib alone, and 9 (22%) lesions were treated with sonidegib and surgical excision.

At treatment end, 15 out of 29 lesions treated with sonidegib alone had CR and 14 out of 29 lesions treated with

sonidegib alone had PR. All lesions treated with sonidegib in association with surgical excision had CR. Patients were clinically followed for a median duration of 9 months after treatments end. In total, 24 (65%) laBCCs achieved CR, 40% with sonidegib alone, and 25% with sonidegib associated with adjuvant therapies. Overall, 33 patients (89%) experienced adverse events: dysgeusia ( $n = 31$ ; 84%), muscle spasms ( $n = 33$ ; 89%), alopecia ( $n = 28$ ; 75%), and weight loss ( $n = 21$ ; 57%). Patients were clinically followed for a median duration of 9 months after the end of treatments. Although surgery is the main treatment for the majority of BCCs, advanced disease requires the use of HHI treatment; in line with the article published by Weissman et al,<sup>3</sup> HHI treatment also could be considered as neoadjuvant treatment to decrease tumor area before surgery or as induction therapy concomitant to radiation therapy in order to avoid possible recurrences.<sup>4,5</sup> A limitation of the study was the retrospective design. Studies with a larger sample size are still required.

## References

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