Thermoluminescent detectors (TLDs) are widely used in radiation therapy for dosimetric applications. The commissioning of TLDs entails the ordering of each TLD dosimeter as per its individual sensitivity to radiation. We have used computerized spreadsheets to facilitate the logging in of the results from batches of 50 LiF TLD100 dosimeters and arranging them in ascending sensitivity order. Each TLD is subjected to three irradiations that are used to calculate their individual sensitivities. The differences of sensitivities within a batch of TLDs can be as high as 16%. Therefore, the individual sensitivity is used together with a calibration factor extracted from a standard subset, referenced as control TLDs, to yield absorbed dose. After sorting, TLDs are grouped into families of three, whose sensitivities are within 2% from each other. Once in clinical use, in vivo readings are entered into a new spreadsheet, which retains the family sensitivities, to determine dose in cGy. We use TLDs on a regular basis to monitor patients receiving total skin electron therapy, and for quality assurance of other external beam patients.