INTRODUCTION AND AIM
The challenge of immediate implant placement in premolar or molar sites is to achieve primary stability at the presence of interradicular bone septa. This case report illustrates a step-by-step approach for the immediate placement of an implant in a premolar area in the upper jaw with pre-extractive implant bed preparation.

MATERIAL AND METHODS
A patient (76y) with a fractured and hopeless upper right first premolar visited our clinic. All neighboring teeth were provided with fixed restorations. After clinical and radiographic analysis, a single crown implant restoration via immediate implant placement was planned (Fig. 1a-d).

All drilling steps were performed directly through the remaining root for achieving an optimal three-dimensional orientation of the implant axis. After finishing the implant bed preparation, the remaining root was carefully extracted in two parts. The socket walls were well conserved. After sounding of the height of the limbus alveolaris, an implant (3.8x11mm) was placed with sufficient primary stability (Fig. 2a-i).

RESULTS
The CAD/CAM implant restoration was screwed to the implant. The screw access hole was sealed by white gutta-percha followed by a tooth-colored composite material (Fig 4a-d).

During the three months to one-year follow-up stable gingival conditions could be observed.

CONCLUSION
From a clinical point of view, the concept of pre-extractive implant bed preparation allowed safe and precise positioning and angulation of an immediately placed implant. This is due to minimization of possible deflection of the osteotomy drills from the ridge of the bone septa. Therefore, the probability to achieve sufficient primary stability seems to be higher than in case of post-extraction implant bed preparation.