Table 1: Influence of the enucleation cavity and different irrigation flow rates in a 100 ccm enucleation cavity

| Enucleation cavity | Probe 1 | Probe 2 | Probe 3 | Probe 4 | Probe 5 | Probe 7 |
|--------------------|---------|---------|---------|---------|---------|---------|
| Post-enucleation cavity | 3,7     | 3,7     | 3,2     | 1,8     | 1,9     | 2,8     |
| enucleation cavity   | 100 ccm | 10 ccm  | 287 ml/min | 4,5     | 4,6     | 3,5     | 2,2     | 1,8     | 3,3     |
| proximal instrument shaft | 3,7     | 3,3     | 1,8     | 2,8     | 1,6     | 3,7     |
| medial instrument shaft | 436 ml/min | 3,7     | 3,7     | 3,2     | 2,0     | 1,9     | 2,8     |
| distal instrument shaft | 436 ml/min | 3,3     | 3,3     | 2,0     | 1,8     | 1,5     | 2,4     |

*Irrigation fluid after the experiment

Table 2: Trials without irrigation flow

| Irrigation flow rate in 100 ccm | After 10 s | After 20 s | After 30 s | After 60 s | After 120 s | After 180 s | Max- T |
|--------------------------------|------------|------------|------------|------------|-------------|-------------|--------|
| 10 ccm                         | 33 °C      | 47,0 °C    | 53,4 °C    | -          | -           | -           | 61,9 °C |
| 20 ccm                         | 30,9 °C    | 36,5 °C    | 43,1 °C    | 55,8 °C    | -           | -           | 61,2 °C |
| 30 ccm                         | 26,9 °C    | 30,8 °C    | 34,9 °C    | 44,2 °C    | 57,7 °C     | -           | 60,6 °C |
| 50 ccm                         | 25,6 °C    | 29,0 °C    | 31,4 °C    | 38,0 °C    | 49,2 °C     | 58,4 °C     | 62,0 °C |
| 100 ccm                        | 22,8 °C    | 25,2 °C    | 26,1 °C    | 29,8 °C    | 35,2 °C     | 38,9 °C     | 48,0 °C |

T: Temperature
Table 3: Temperature differences Probe 7, outlet flushing

| Temperature difference (in K) – Probe 7 Flushing drain |          |
|-------------------------------------------------------|----------|
| 10 ccm, 344 ml/min                                   | 3.68     |
| 20 ccm, 344 ml/min                                   | 3.32     |
| 30 ccm, 344 ml/min                                   | 3.39     |
| 50 ccm, 344 ml/min                                   | 3.16     |
| 100 ccm, 344 ml/min                                  | 2.78     |

Table 4: Prostate resection trainer, temperature differences (in K) of temperature probe 2, two irrigation flow rates in comparison for a enucleation cavity of 10 ccm

| Prostate resection trainer | Temperature difference after 1 min | 2 min | 3 min | 4 min | 5 min | 6 min |
|----------------------------|-----------------------------------|-------|-------|-------|-------|-------|
| Probe 2, 344 ml/min        | +/- 0 K                           | 0,1 K | 0,3 K | 0,5 K | 0,8 K | 1,1 K |
| Probe 2, 0 ml/min          | 0,1 K                             | 1,0 K | 2,2 K | 3,0 K | -     | -     |

Table 5: Influence of power on necrosis depth in Experiment II

| Average depth of necrosis ± SD (µm) | 6,5 sprayCOAG® in accordance with 78 W, n = 22 | 10 sprayCOAG® in accordance with 144 W, n = 8 |
|-------------------------------------|-----------------------------------------------|-----------------------------------------------|
|                                     | 718 ± 92                                       | 1084 ± 176                                    |

SD: standart deviation