ABSTRACT

**METHODS OF TREATING UPPER TRACT UROTHELIAL CARCINOMAS**

The invention relates to methods for locally delivering a chemotherapeutic agent to an upper tract urothelial carcinoma (UTUC). The methods involve placing a balloon catheter that has a working channel and a balloon into the ureter/renal pelvis via retrograde or antegrade ureteral access; inflating the catheter balloon to temporarily obstruct the ureter; infusing (instilling) a liposomal formulation that includes a chemotherapeutic agent into the working channel of the catheter; and allowing the infused liposomal formulation to dwell in the ureter and/or renal pelvis for a time sufficient to allow at least a portion of the liposomal formulation to adhere to the urothelial wall. In the methods of the invention, at least a portion of the infused chemotherapeutic-agent formulation adheres to the urothelial wall while it is instilled and dwells in the ureter and/or renal pelvis. The disclosed methods can be performed as an adjuvant therapy to other methods of treating UTUC, such as ureteroscopic ablation or resection of the tumor.

Figure 1