<table>
<thead>
<tr>
<th>Vaccination strategy</th>
<th>Advantages</th>
<th>Disadvantages</th>
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| Whole tumor cells    | - Complete Ag pool of an individual tumor (including Ags that have not been identified yet)  
- Activation of a polyclonal and more effective immune response  
- The immune system rather than the vaccinologist selects the most immunogenic tumor-specific Ags | - Must be made individually for each patient  
- Lack of co-stimulatory molecules on solid tumor cells  
- Immune response difficult to monitor  
- Induction of auto-immunity in presence of adjuvant |
| Dendritic cells (DCs) | - Presentation of the vaccine Ags to other cell types of the immune system  
- Expression of high levels of HLA complexes and co-stimulatory molecules  
- Stimulation of both naive and memory T cells | - Must be made individually for each patient  
- Generation of DCs technically challenging  
- Money- and time-consuming treatment |
| DNA                  | - Easy and cheap to produce and purify  
- Require no special handling or storage conditions  
- Elicitation of both CD8+ and CD4+ immune responses as well as humoral responses | - DNA integration into the cell genome potentially promoting malignancy  
- Less effective than peptide vaccines at inducing the CD8+ T cell response |
| Peptides             | - Easy to manufacture  
- Strong CD8+ T cell response  
- Known sequence and biochemistry  
- Allow specific monitoring of the patient’s immune response | - Immune response limited to one or few epitopes  
- HLA-restriction  
- Degradation in absence of adjuvant |
| Anti-idiotypic antibodies | - Unrestricted HLA population  
- Allow effective vaccination against non-protein Ags and poorly immunogenic Ags  
- Elicit both humoral and cellular immune response | - Human anti-mouse antibody response |