Appendix A: Calculations, Assumptions, Clearances

**BSA**

<table>
<thead>
<tr>
<th>Author</th>
<th>BSA formula</th>
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<tbody>
<tr>
<td>Mosteller(^1)</td>
<td>(BSA (\text{m}^2) = [Ht (\text{cm}) \times Wt (\text{kg}) / 3600]^{\frac{1}{2}}) or (BSA (\text{m}^2) = [Ht (\text{in}) \times Wt (\text{lbs}) / 3131]^{\frac{1}{2}})</td>
</tr>
<tr>
<td>Du Bois and Du Bois(^2)</td>
<td>(BSA (\text{m}^2) = Wt (\text{kg})^{0.425} \times Ht (\text{cm})^{0.725} \times 0.007184)</td>
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<tr>
<td>Haycock et al(^3)</td>
<td>(BSA (\text{m}^2) = Wt (\text{kg})^{0.5378} \times Ht (\text{cm})^{0.3964} \times 0.024265)</td>
</tr>
<tr>
<td>Gehan and George(^4)</td>
<td>(BSA (\text{m}^2) = Wt (\text{kg})^{0.51456} \times Ht (\text{cm})^{0.42236} \times 0.02350)</td>
</tr>
<tr>
<td>Boyd(^5)</td>
<td>(BSA (\text{m}^2) = Wt (\text{kg})^{0.4838} \times Ht (\text{cm})^{0.3} \times 0.017827)</td>
</tr>
</tbody>
</table>

**Cockcroft-Gault Equation\(^6\)**

- Substitute GFR with creatinine clearance that is calculated via Cockcroft-Gault equation

  **CrCl Calculation (Cockcroft-Gault Formula):**
  
  \[
  \text{CrCl (men; mL/min)} = \left(140 - \text{age}\right) \times \left(\text{weight in kg} \div (\text{serum creatinine} \ [\text{mg/dL}] \times 72)\right)
  \]
  
  \[
  \text{CrCl (women; mL/min)} = 0.85 \times \text{CrCl (men)}
  \]

**Isotope Dilution Mass Spectrometry (IDMS)**

- Utilizes standardized method to measure serum creatinine (SCr) utilized by US clinical laboratories\(^7\)
- May underestimate SCr values compared to older methods when the SCr values are relatively low

**REFERENCES**