



# Chronic Kidney Disease (CKD) and anaemia

## CKD: An overview

### CKD is a highly prevalent and under-diagnosed disease affecting:<sup>1</sup>

- 1 in 10 people globally
- 1 in 8 people in Europe, East Asia (including Japan) and the Middle East

Since 1990, the prevalence and incidence of CKD has almost doubled and the disease is projected to be the fifth most common cause of premature death by 2040.<sup>2,3</sup>

CKD is defined as the progressive loss of kidney function over time.<sup>4</sup> It occurs when a disease or condition impairs kidney function, causing kidney damage to worsen over several months or years. Diabetes and high blood pressure are responsible for up to two-thirds of all cases of CKD.<sup>4</sup>

In the early stages of CKD, patients may have few signs or symptoms, and the disease may not become apparent until kidney function is significantly impaired.<sup>4</sup> Patients may require dialysis or a kidney transplant when their kidney function is severely impaired. Dialysis is a procedure that removes accumulated fluid, urea and other toxins from the blood via filtration.<sup>5</sup> Patients on dialysis may need to be connected to a dialysis machine for 4 hours, 3 times a week.<sup>5</sup> As CKD progresses, the risk of heart attack, stroke and premature death increases significantly.<sup>6</sup>

## Anaemia can be a serious complication of CKD

Anaemia occurs when the production of red blood cells is reduced, impairing the delivery of oxygen to tissues and organs.<sup>7</sup>

Based on data from the UK, 1 in 5 people with CKD develop anaemia.<sup>8</sup> Anaemia generally increases in frequency and severity in the more advanced stages of CKD.<sup>9</sup>

Anaemia of CKD doubles the risk of death compared with patients without anaemia of CKD<sup>10</sup> and accelerates the progression of CKD.<sup>11</sup>

## Anaemia of CKD can have a significant physical and emotional impact on patients

Anaemia can create a significant burden for patients with CKD and can have a negative impact on patients' quality of life, similar to other chronic conditions such as diabetes, epilepsy or certain forms of cancer.<sup>12,13</sup>

People with anaemia can have more challenges with mobility, self-care, day-to-day living, experience more pain and discomfort, and suffer greater anxiety and depression compared with patients with CKD who do not have anaemia.<sup>12</sup>

The symptoms of anaemia of CKD can include looking pale, low energy, fatigue, poor appetite, trouble sleeping, having trouble thinking clearly, feeling dizzy or having headaches, rapid heartbeat, shortness of breath and feeling depressed.<sup>14</sup>



## Managing anaemia of CKD

The goal of anaemia of CKD treatment is to raise and stabilise haemoglobin levels within target range.<sup>15</sup>

### Many patients with anaemia of CKD are not receiving any treatment, while others are not treated to target

Despite the high burden of anaemia of CKD,<sup>12,16</sup> many patients are not receiving any treatment,<sup>17</sup> putting them at risk of serious complications.<sup>11,12</sup>

As many as half of anaemia of CKD patients may have haemoglobin levels outside the recommended range.<sup>18,19</sup>

Concerns about the side effects of current treatments can lead to a conservative approach to treating CKD.<sup>20,21</sup>

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