

## Oncimmune's written submission to the Health and Social Care Committee inquiry into delivering core NHS and care services during the pandemic and beyond

### Summary

- Oncimmune is a diagnostics company with a specialism in the immune system and a range of oncology blood tests in market and in development. Our EarlyCDT® Lung test – of which more than 160,000 have been used – can detect the presence of lung cancer with a blood test at a much earlier stage than other approaches. Our test can be administered inside and outside the hospital setting via a home testing kit, in a community pharmacy, or through a GP practice.
- Early detection and diagnosis can dramatically improve a patient's prognosis: the current one-year survival rate is approximately 83% for stage I lung cancer but is only 17% for those with stage IV disease.<sup>1</sup> Our primary concern in the current environment is the impact on late lung cancer diagnosis. Lung cancer kills over 35,000 people a year in the UK accounting for 21% of all cancer deaths<sup>2</sup> and is the fifth most common cause of death overall<sup>3</sup>.
- Although there has been no formal cancellation of cancer early detection and screening programmes in England, there have been widespread reports of a defacto halting of these vital services. In addition to this there has been a 75% drop in cancer presentations<sup>4</sup>, which may be due to public concern about attending healthcare appointments and contracting the virus or overburdening the NHS at this difficult time. This is of grave concern for those with lung cancer given the importance of early presentation to the success of treatment.
- A recent UCL study<sup>5</sup> into excess mortality in those with cancer and multi-morbidity in the COVID-19 emergency estimate an additional 6,270 deaths within a one year and 18,000 deaths overall. The paper calls for prioritisation of life-saving early diagnosis and for vulnerable populations at risk to receive shielding interventions.
- Based on the latest available statistics from the Office of National Statistics, 38,381 people were diagnosed with lung cancer in 2016<sup>6</sup>. If you apply the 75% reduction in presentations to this statistic, there are 738 missed lung cancer diagnoses every week. **Since the UK went into lockdown on 23 March 2020, an estimated 4798 cases of lung cancer have gone undiagnosed<sup>7</sup>.**
- In addition to this, those who are classed as vulnerable because of their age and are currently shielding from the virus, are also in the most at risk age group for developing lung cancer, perhaps indicating that the estimated number of missed diagnoses above are somewhat conservative.
- At this time the NHS should look to use available diagnostic technologies to screen for common cancers including lung in a community setting or at home where possible, reducing risk for healthcare professionals and patients. At home testing in particular should be prioritised for those who are shielding from the virus to ensure equity of access to healthcare across the population.

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<sup>1</sup> Cancer Research UK. Lung cancer survival 01.04.20 [Available here](#)

<sup>2</sup> Cancer Research UK, Lung cancer survival 01.04.20 [Available here](#)

<sup>3</sup> ONS, Deaths registered in England and Wales 2017 01.04.20 [Available here](#)

<sup>4</sup> Cancer Research UK, How Coronavirus is impacting cancer services in the UK 29.04.20 [Available here](#)

<sup>5</sup> UCL IHI-led research shows COVID-19 emergency could lead to 18,000 more deaths in people with cancer 30.04.20 [Available here](#)

<sup>6</sup> ONS, Cancer Registration Statistics 2016: England 29.04.20 [Available here](#)

<sup>7</sup> Calculation based on average diagnosis of lung cancer cases over 6.5 weeks (23<sup>rd</sup> March – 7<sup>th</sup> May). Uses 2016 lung cancer diagnosis annual figure (see ref 5) and the estimated 75% drop in overall cancer presentations (see ref 4)

- Diagnostics such as EarlyCDT Lung also ease the burden on hospitals; our diagnostic test can be used to rule-in high risk people for a CT screening programme thereby improving the efficiency of the programme, requiring fewer CT scans and reducing demand on radiologist time per cancer detected.
- Early presentation of lung cancer can be through the presentation of indeterminate pulmonary nodules (IPNs) in the lung. The presence of IPNs do not always indicate lung cancer hence the name 'indeterminate'. A NICE review concluded in March 2020, confirmed that EarlyCDT Lung enables risk stratification of patients with IPNs and also stated it could be offered *before* CT surveillance, potentially enabling earlier treatment, improved outcomes, NHS resource savings and reduced waiting times.<sup>8</sup>
- Our diagnostic technology could therefore be helpful not only in detecting lung cancer early, but also in reaching vulnerable groups and minimising unnecessary hospital visits, as well as increasing much needed capacity as the NHS recovers from the COVID-19 pandemic.

#### **Recommendation for the Committee**

We would urge the Rapid Diagnostic Centres to urgently publish new guidance on how to support screening and testing for common cancers including lung cancer outside of the hospital setting and, in the home, where possible, especially for vulnerable populations. This should be coupled with annual targets for each common cancer to ensure progress to the 75% early cancer diagnosis target by 2028 set out in the NHS Long Term Plan.<sup>9</sup>

#### **Response to specific topics identified by the Committee inquiry**

1. How to achieve an appropriate balance between COVID-19 and 'ordinary' health and care demand
  - 1.1. New technologies such as diagnostics can enable healthcare to be delivered outside of hospitals in the community setting or even at home. Under-funded and misunderstood for some time, appropriate diagnostics can both reduce capacity pressures on hospitals as well as reduce the exposure of patients and healthcare professionals to COVID-19. While some progress is being made in the adoption of these new technologies in certain parts of the NHS, the current circumstances should act as a catalyst for widespread commissioning of these solutions.
  - 1.2. Our EarlyCDT Lung test, which detects the presence of lung cancer through a blood test, can be undertaken by a patient via a home testing kit or in the community via a GP practice. This approach reduces the risk of sending a potentially vulnerable patient into hospital for a CT scan and inadvertently exposing them to COVID-19, or sending a potentially ill patient into hospital and increase the risk of spread. It also reduces the demand on CT scanners and radiologists by providing an opportunity to triage patients with positive blood tests without the need for them to enter hospital.
2. Meeting the wave of pent-up demand for health and care services that have been delayed due to the COVID-19 outbreak

<sup>8</sup> NICE, EarlyCDT Lung for cancer risk classification of indeterminate pulmonary nodules 29.04.20 [Available here](#)

<sup>9</sup> NHS Long-term Plan 29.04.20 [Available here](#)

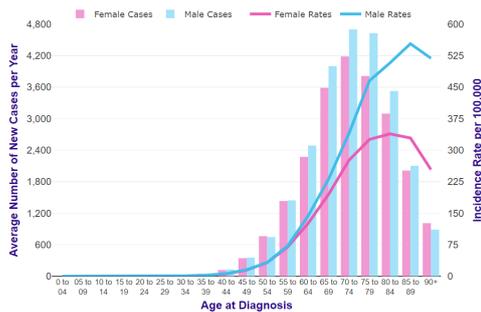
Diagnostics such as EarlyCDT Lung can support the reduction of demand on hospital equipment and healthcare specialists and thus maximise the availability of resources to deal with additional demand for services<sup>10</sup>.

### 3. Providing healthcare to vulnerable groups who are shielding

#### 3.1. Lung cancer has a strong correlation with age as clearly shown in diagram 1.

Diagram 1:

Lung cancer (C33-C34), Average Number of New Cases per Year and Age-Specific Incidence Rates per 100,000 Population, UK, 2015-2017



SOURCE: Cancer Research UK<sup>11</sup>

3.2. Those shielding from COVID-19 and considered vulnerable are also in the most at risk age group of developing lung cancer. It is therefore vital to find ways to screen and test this shielded group without exposing them unnecessarily to the virus. Diagnostic technology such as our EarlyCDT Lung test can be administered via home testing kits or through a GP practice before sending a vulnerable person into the hospital setting, reducing the number of vulnerable people potentially exposed to the virus.

### 4. How to ensure that positive changes that have taken place in health and social care as a result of the pandemic are not lost as services normalise

4.1. Oncimmune has found the NHS response to the pandemic inspiring. It has also shown that, when needed, the service can act swiftly and decisively. We would encourage the NHS to capitalise on this momentum and instead of returning to pre-COVID-19 approaches, consider where new technologies can support the overall ambition of the NHS Long-term Plan to 'boost out-of-hospital care', 'invest in faster, modern diagnostics' and diagnosing 75% cancers at stage I/II by 2028<sup>12</sup>. Out-of-hospital care will be particularly important to accelerate if the NHS is to effectively deal with increased capacity challenges and to limit exposure to the virus during the recovery of the pandemic.

<sup>10</sup> NICE, EarlyCDT Lung for cancer risk classification of indeterminate pulmonary nodules 29.04.20 [Available here](#)

<sup>11</sup> Cancer Research UK, Lung Cancer Incidence Statistics 29.04.20 [Available here](#)

<sup>12</sup> NHS Long Term Plan 29.04.20 [Available here](#)



## **About Oncimmune**

### **Beating cancer, one test at a time**

The battle against cancer hinges on early detection and then the delivery of effective treatment. Oncimmune is working to revolutionise both the detection of cancer and its treatment by harnessing the sophisticated disease detecting capabilities of the immune system to find cancer in its early stages. Our range of diagnostic tests assist clinicians to identify the presence of cancer on average four years before standard clinical diagnosis, whilst our technology platform and sample biobanks are helping healthcare companies to develop new cancer treatments.

Oncimmune was founded in 2002 and launched its platform technology in 2009, followed by its first commercial tests, EarlyCDT Lung and EarlyCDT Liver. To date, over 160,000 tests have been performed for patients worldwide. EarlyCDT Lung was also used in what is believed to be the largest randomised controlled trial for the early detection of lung cancer using biomarkers, the successful National Health Service (NHS) Early detection of Cancer of the Lung Scotland (ECLS) trial of 12,209 high-risk smokers in Scotland which demonstrated EarlyCDT Lung reduced the incidence of patients with late-stage lung cancer or unclassified presentation at diagnosis, compared to standard clinical practice.

Oncimmune, headquartered at its laboratory facility in Nottingham, UK, has a discovery research centre in Dortmund, Germany and in London, UK and a partner representative office in Shanghai, China. Oncimmune joined the Alternative Investment Market (AIM) of the London Stock Exchange in May 2016 under the ticker ONC.L.