More than medicine:
The responsibility of industry to patients

29 January 2020
We are in a global cancer epidemic

Cancer worldwide burden (2018 → 2030)

- 18.1m new cases
- 9.6m deaths
- 43m living with cancer

- 26.4m new cases
- 17m deaths
- 82m living with cancer

Source: International Agency for Research on Cancer (IARC)
...and yet, we are close to breaking the code
An era of exponential increase in oncology innovation

FDA oncology approvals/year

- Hormonals (Estrogen)
- Combination Chemotherapy
- Novel anti-Hormonals
- Chemotherapy

Discovery of BCR-ABL
EGF isolated
Stem cell transplant
Oncogenes
PCR
Proteomics
ChIP-seq
BRCA
HER2amp
Cell cycle
HTS
CRISPR
ATAC-Seq
Immunology single cell sequencing
IPS cells, RNA-Seq
Cancer Genome Atlas (TCGA)
Human Genome Sequenced

Targeted therapies (Gleevec, Iressa)
Antibodies (Rituxan, Herceptin)
IO (Yervoy, Keytruda)
DDR (Lynparza)
CDK 4/9 (Ibrance)
ADC (in solids, Kadcyla)
CAR-T (in heme)
Epigenetics (in heme)

Source: ACS research article on Medium.com; NME + Supplemental approvals. Includes cancer drugs, diagnostic & surgery devices.
Data compiled from drugs@fda.gov, National Cancer Institute, FDA Orange Book, FDA.gov, and centerwatch.com.
Significant advances have achieved near cure in some tumours…

…progress has been made in others though not yet converted to cure
Lung cancer: The leading cause of cancer-related death\(^1\)

- **2 million**
  - new patients diagnosed in 2018\(^2\)

- **1.8 million**
  - deaths in 2018 alone\(^2\)

- **\(~20\%\)**
  - are alive 5 years after diagnosis\(^3\)

Stigma and delayed onset of symptoms hinder diagnosis and treatment: only 15% are diagnosed in early stages\(^4,5\)

5-year survival is lagging behind advances for several other common cancers\(^6\)
LC is typically diagnosed in late stages where prognosis is much worse. Only 1 in 5 people will be alive 5 years after a lung cancer diagnosis.

>75% of lung cancer patients are diagnosed with late stage disease.

### NSCLC 5-year Survival

- **Stage 1**: 76%
- **Stage 2**: 57%
- **Stage 3**: 25%
- **Stage 4**: 5%

Sources:
Today, 1.8M people die from lung cancer every year

We have an opportunity to make significant improvements in outcomes across the patient journey…

Screen 70% of high-risk population in the US

Expand penetration of best novel therapies to 75%

Improve SOC in all geographies to match JAPAN

Stage Distribution:
- Stage I: 23% → 33%
- Stage II: 9% → 8%
- Stage III: 20% → 18%
- Stage IV: 48% → 41%

5 Year Survival:
- US: 21% → 33%
- EU5: 16% → 33%
- China: 20% → 33%

Today, 1 in 5 People will be alive 5 years after a lung cancer diagnosis
Accelerating advances for people with lung cancer
Goal: Enhance the ecosystem across the patient experience

The undiagnosed
Screen & diagnose early

1. Screening Access & Policy
   - LAA Global Scientific Steering Committee
   - LAA Policy and implementation playbook

2. Screening Rates
   - Local programs (e.g. China, France & Sweden)

3. New Technology
   - Early Lung Imaging Confederation (ELIC)
   - Screening AI (Google)
   - ctDNA (Guardant & others)

The diagnosed
Deliver innovative medicine

1. Early Stage Disease
2. Resistance Mechanisms
3. New Clinical Endpoints
   - Major Pathologic Response Project

The treated
Enhance the quality of care

1. Local Advocacy & Action
   - ILC² (Initiatives in Lung Cancer Care)

2. Community
   - LVNG with Lung Cancer

3. Education
“If you want to go fast, go alone… If you want to go far, go together…”

— African proverb
Bold ambition: Eliminate lung cancer as a cause of death
Together with peers and partners we will double 5-year survival by 2025

The LungAmbition Alliance

The International Association for the Study of Lung Cancer (IASLC):
The only global organization dedicated to the study of lung cancer, with a global network of more than 6,500 specialists across all disciplines in over 100 countries

The Global Lung Cancer Coalition:
The international voice of lung cancer patients and committed to patient advocacy

Guardant Health:
An innovative diagnostics company with a vision to enable earlier detection through access to molecular information in the blood

AstraZeneca:
A global, science-led biopharmaceutical company that focuses on the discovery, development and commercialization of prescription medicines
AZ: Working to Advance Lung Cancer Screening Technology

If we can detect LC before it is clinically evident, can we prevent the cancer progressing?

1. DETECT
   Can a blood test detect lung cancer?

2. VALIDATE
   Can a blood test detect lung cancer before a CT scan?

3. INTERCEPT
   Can we treat lung cancer before it is clinically detectable?
LVNG With Lung Cancer program
Education, engagement, empowerment for those impacted by lung cancer

Web Resource: www.lvng.com
- Global initiative implemented in all major countries
- Newly designed and refreshed website (November)
- Provides comprehensive information on diagnosis, biomarker testing etc.
- Information on how to manage and thrive while living with lung cancer

Social media community: Facebook
- World’s largest online lung cancer community
- Facebook community of over 200,000
- Average weekly reach of 2M

I know I’m far from winning, but with YOU ALL, I CAN and will beat it.
Thank you for the love and support from the living with lung cancer family.

- Rick, LVNG With Community Member
A grants program to support local non-profit organizations in delivering initiatives that will improve the quality of care for patients with lung cancer

The program will:

- Provide financial support
- Provide non-financial support (peer-to-peer learning, mentoring, networking and educational events, etc.)
- Applications submitted online [www.lungambitionalliance.com](http://www.lungambitionalliance.com)
- Administered by Charities Aid Foundation