Question & Answer: Brief for PatientMetRx® Customer

Talking Medicines Limited is the world's first AI driven social intelligence company designed specifically for the pharmaceutical industry. By structuring and translating the patient's voice from social media through Artificial Intelligence into actionable intelligence, it helps Pharmaceutical Companies deliver a greater return on investment for marketing, supporting commercial decision making and brand planning.

The PatientMetRx® platform offers online subscription access to patient confidence scores by medicine with contextual data on what drives change in patient confidence for portfolio medicine brands and the competitive set.

The PatientMetRx® Platform

How does Artificial Intelligence drive PatientMetRx®?	The PatientMetRx® data platform uses proprietary Artificial Intelligence (AI) models to structure real world conversations directly from patients about their medicines. These models are driven by Machine Learning (ML), and Natural Language Processing (NLP) to filter unstructured patient feedback to model output. This means that the output does not include any direct verbatims from patients. Reference documents to proprietary Talking Medicines technology: • UK patent filed in February 2021 can be accessed here with the application number GB2101783.5 • Commercial publication – Alex, B., Whyte, D., Duma, D. *et al.* Classifying patient and professional voice in social media health posts. *BMC Med Inform Decis Mak* **21**, 244 (2021). viewed here
How often is the PatientMetRx® platform updated?	The PatientMetRx® platform uses real time data and it is updated daily. Within the PatientMetRx® platform customers can view Patient Confidence Scores for a medicine from January 1st 2015 up to within 7 days of the current date. This 7-day window allows for Quality Control checks to be completed.
Has the PatientMetRx® platform been tested?	The PatientMetRx® platform is monitored on an ongoing basis to ensure that the highest quality standards are maintained. Prior to release PatientMetRx® is tested through cycles of external Penetration (PEN) testing. Each Customer has their own secure login username and password to access the PatientMetRx® dashboard.

Where is patient feedback data sourced from?	Data is collected from multiple social sources that follow where patients are talking about their medicines. Ingesting global, English speaking source data at scale, enabling customers to access aggregated patient insights at scale to truly understand what patients are experiencing in the real world. Being aware of sociodemographic differences and data source bias Talking Medicines strive to include as many high-quality data sources as possible and bring new sources in as they become relevant. Data is sourced from validated sources with no personal identifiable data being processed. Current data sources include social media players such as Reddit, data aggregators such as Socialgist ([partnership from July 2021](#)) as well as multiple smaller patient boards. Systems are in place for the access and/or deletion of data if requested by any data source partner. Talking Medicines are committed to including as many high-quality data sources as possible, wherever Patients speak.
Who owns the data?	Talking Medicines are the registered data controller with the Information Commissioner's Office (ICO). The company is compliant to General Data Protection Regulation (GDPR) standards and has a Data Protection Officer (DPO) in place.
What is the level of data accuracy?	The Talking Medicines AI driven patient voice classifier is over 95% accurate – it filters out other voices so that only the patient voice is processed through the Talking Medicines modelling technology. By filtering to Patient Voice, Talking Medicines differentiates itself to data feeds provided by social intelligence enterprises.
What is the medicine coverage?	Talking Medicines have created and wholly own a curated medicine database of regulated medicines. This database includes fields for where, when and what medicines are approved for from the US and UK regulatory agencies. Data is sourced on approved medicines from the Medicines and Healthcare product Regulatory Agency (MHRA) for UK and the Food and Drug Administration (FDA) for US regulated medicines. Talking Medicines apply knowledge on knowing the brand and generic medicine names by country to match the patient voice to the medicines database.
What quality checks are in place?	Talking Medicines embraces regulatory compliance with product accuracy based on statistical quality control. Standard Operational Procedures (SOPs) and processes are in place so that all those handling data are trained and compliant. The PatientMetRx® platform does not transfer any personal identifiable data to its customers. The curation, organization and integration of data (collected from multiple sources) is completed by suitably qualified and trained personnel, who follow strict proprietary guidelines. All data must pass robust quality control processes to ensure that the data is real, has been aggregated legally, and passes US, EU and UK standards in data processing, data security, transference, and consent.

	All data insights and trends are non-personally identifiable and show aggregated patterns of patient behaviour.
Where is data stored?	Data is stored securely on Talking Medicines Server which is managed through Microsoft Azure and located in the UK. No data is held outside the European Economic Area ("EEA"). Customer data is stored to provide the service for the duration of their subscription.
Who has access to the data?	Only personnel with the right permissions can access the data; this is carefully monitored and reviewed on a regular basis in line with legal and regulatory requirements.

PatientMetRx® Compliance and Regulatory

What is the medical device status?	The PatientMetRx® platform does not fall under the definition of a medical device; the product displays data only.
What medicine advertising guidance is in place?	Talking Medicines seek advice from the Medicines and Healthcare product Regulatory Agency (MHRA) Blue Guide – "Advertising and promoting of medicines in the UK" to ensure that medicines information is displayed correctly and ethically.
What data compliance is in place?	Talking Medicines take data very seriously and take all reasonable steps to ensure that data is collected, stored and processed correctly and compliantly. Talking Medicines have had a Data Protection Officer (DPO) advising the Company since May 2018. Extensive data compliance within Talking Medicines includes (but is not limited to) items such as Data Protection Impact Assessments (DPIA), GDPR adherence, Risk Registers, DPO/Data Expert advice, Terms & Conditions, Privacy Policies. The Talking Medicines Quality Subcommittee meets quarterly, and the aim is primarily to track and control the quality and security of medicines data from the Patients, Customers and Talking Medicines point of view.
How are Adverse Events monitored?	There are no Adverse Events from the PatientMetRx® data insights service. No patient verbatims or data feeds are provided. Talking Medicines work with the regulatory and industry associated bodies (FDA/MHRA/BHBIA) for guidance in the processing of patient intelligence by medicines through the use of Artificial Intelligence (AI). Talking Medicines consistently seek advice on country specific laws like the Health Insurance Portability and Accountability Act (HIPAA) to protect sensitive patient health information from being disclosed without the patient's consent or knowledge. Talking Medicines are members of the British Healthcare Business Intelligence Association (BHBIA) and follow their guidance and internal training standards.