

# THE USE OF RADIO-FREQUENCY IDENTIFICATION FOR MEDICINES MARKING

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**Introduction.** Recently, radio-frequency identification technology has been successfully used in various branches. This technology gives more opportunities compared to traditional marking systems. Advantages of radio-frequency labels include: safety, environment-resistance, large reading distance, data-rewriting ability and also the ability of drugs protection from counterfeiting as each label contains a unique code that cannot be faked, changed or deleted.

**Aim.** To analyze the use of radio-frequency identification for marking of pharmaceutical packages.

**Materials and methods.** Logical, analytical, marketing method as for the use of radio-frequency identification method in pharmacy.

**Results and discussion.** RFID-labels in pharmaceutical production help for prompt data obtaining at all stages of production, starting with substances and excipients arrival to the warehouse and ending with shipping of packed medicine.

RFID-systems provide the ability of control at each stage of work from arrival of production to warehouse, its allocation, storage, advancement of data processing due to exclusion of manual input and associated personnel mistakes, records and reports composing and keeping.

Radio-frequency identification of medicines provides unique opportunities for creation of united system of commodity turnover recording and control for departments, with complete transparency of all processes: arrival of medicines to departments; transfer of products to salesroom, immediate satisfaction of a client's demand due to products' positioning in the salesroom, cash transactions and so on.

RFID-labels allow preventing distribution and sales of counterfeit medicines, in attempt to remove the chip is destroyed; life time of the label is not less than 10 years, it is very resistant to mechanical and other impacts; the label can be placed inside the package guaranteeing the impossibility of its substitution with another label without package opening; the label requires no external power supply as for data transfer it uses the scanner field power.

**Conclusion:** Application of radio-frequency labels on packages of medicines will allow tracing the legal chain of supply from initial stage to the last one and also effectively and safely protect the medicine from counterfeiting.